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FROM INDIA TO SOUTH AFRICA.

THE DIARY OF A VOYAGE.

By Mark Twain.

Author of "The Innocents Abroad," "Adventures of Tom Sawyer," etc.

A TRUTHFUL CAPTAIN WHOM NOBODY WOULD BELIEVE, AND A FABLING PASSENGER WHOM NOBODY WOULD DISCREDIT.—A STEAMSHIP LIBRARY PERFECT IN ITS OMISSIONS.—THE ADVANTAGES OF LIVING AWAY FROM MAURITIUS.—BARNUM'S PURCHASE OF SHAKESPEARE'S BIRTHPLACE.

I.

There are no people who are quite so vulgar as the over-refined ones.—*Pudd'nhead Wilson's New Calendar.*

"A Female Uncle."

WE sailed from Calcutta toward the end of March; stopped a day at Madras; two or three days in Ceylon; then sailed westward on a long flight for Mauritius. From my diary:

April 7th.—We are far abroad upon the smooth waters of the Indian Ocean now; it is shady and pleasant and peaceful under the vast spread of the awnings, and life is perfect again—ideal.

The difference between a river and the sea is, that the river looks fluid, the sea solid—usually looks as if you could step out and walk on it.

The captain has his peculiarity—he cannot tell the truth in a plausible way. In this he is the very opposite of the austere Scot who sits midway of the table: *he* cannot tell a lie in an *un*-plausible way. When the captain finishes a statement the passengers glance at each other privately, as who should say, "Do you believe that?"

When the Scot finishes one, the look says, "How strange and interesting!" The whole secret is in the manner and method of the two men.

The captain is a little shy and diffident, and he states the simplest fact as if he were a little afraid of it, while the Scot delivers himself of the most abandoned lie with such an air of stern veracity that one is forced to believe it although one knows it isn't so. For instance, the Scot told about a pet flying-fish he once owned, that lived in a little fountain in his conservatory, and supported itself by catching birds and frogs and rats in the neighboring fields. It was plain that no one at the table doubted this statement.

By and by, in the course of some talk about custom-house annoyances, the captain brought out the following simple, everyday incident, but through his infirmity of style, managed to tell it in such a way that it got no credence. He said:

"I went ashore at Naples one voyage when I was in that trade, and stood around helping my passengers, for I could speak a little Italian. Two or three times, at intervals, the officer asked me if I had any-

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thing dutiable about me, and seemed more and more put out and disappointed every time I told him no. Finally a passenger whom I had helped through asked me to come out and take something. I thanked him, but excused myself, saying I had taken a whisky just before I came ashore.

"It was a fatal admission. The officer at once made me pay sixpence import duty on the whisky—just from ship to shore, you see; and he fined me five pounds for not declaring the goods, another five pounds for falsely denying that I had anything dutiable about me, also five pounds for concealing the goods, and fifty pounds for smuggling, which is the maximum penalty for unlawfully bringing in goods under the value of sevenpence ha'penny. Altogether, sixty-five pounds sixpence, for a little thing like that!"

"Yet a cat would have liked that place."

The Scot is always believed, yet he never tells anything but lies; whereas the captain is never believed, although he never tells a lie—so far as I can judge. If he should say his uncle was a male person, he would probably say it in such a way that nobody would believe it; at the same time the Scot could claim that he had a female uncle and not stir a doubt in anybody's mind. My own luck has been curious all my literary life: I never could tell a lie that anybody would doubt, nor a truth that anybody would believe.

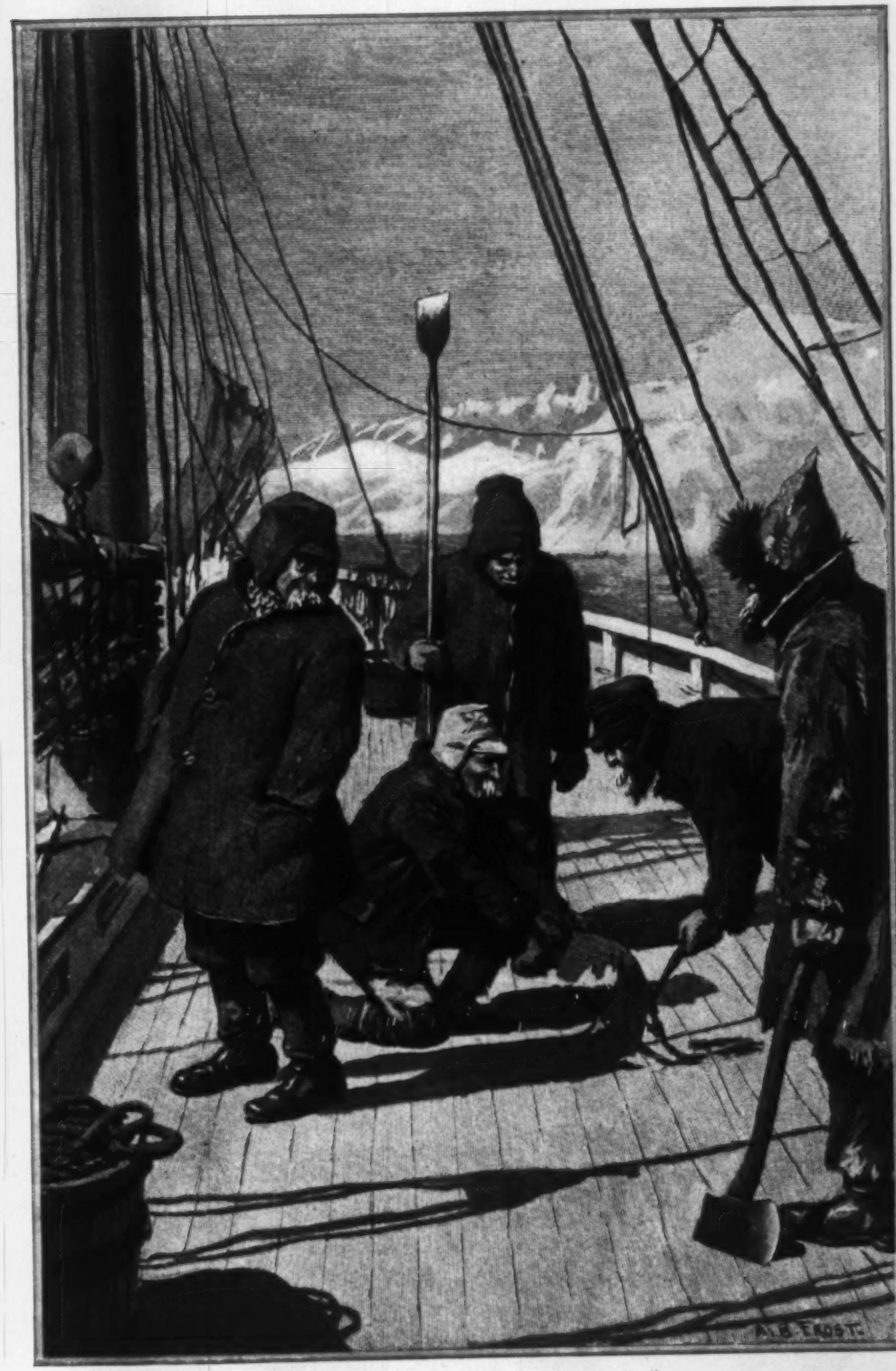
Lots of pets on board—birds and things. In these far countries the white people do seem to run remarkably to pets. Our host in Cawnpore had a fine collection of birds—the finest we saw in a private house in India. And in Colombo, Dr. Murray's great compound and commodious bungalow were well populated with domesticated company from the woods: frisky little squirrels; a Ceylon mina walking sociably about the house; a small green parrot, that whistled a single urgent note of call without motion of its beak, also chuckled; a monkey in a cage on the back veranda, and some more out in the trees; also a number of beautiful macaws in the trees; and various and sundry birds and animals of breeds not known to me. But no cat. Yet a cat would have liked that place.

April 9th.—Tea-planting is the great business in Ceylon now. A passenger says it often pays forty per cent. on the investment. Says there is a boom.

April 10th.—The sea is a Mediterranean blue; and I believe that that is about the divinest color known to nature.

It is strange and fine—nature's lavish generosities to her creatures. At least to all of them except man. For those that fly she has provided a home that is nobly spacious—a home which is forty miles deep and envelops the whole globe, and has not an obstruction in it. For those that swim she has provided a more than imperial domain which is miles deep and covers three-fifths of the globe. But as for man, she has cut him off with the mere odds and ends of the creation. She has given him the thin skin, the meager skin which is stretched over the remaining two-fifths—the naked bones stick up through it in most places. On the one-half of this domain he can raise snow, ice, sand, rocks, and nothing else. So the valuable part of his inheritance really consists of but a single fifth of the family estate; and out of it he has to grub hard to get enough to keep him alive and provide kings and soldiers and powder to extend the blessings of civilization with. Yet man, in his simplicity and complacency and inability to cipher, thinks nature regards him as the important member of the family—in fact, her favorite. Surely it must occur to even his dull head, sometimes, that she has a curious way of showing it.

Afternoon.—The captain has been telling how, in one of his Arctic voyages, it was so cold that the mate's shadow froze fast to the deck and had to be ripped loose by main strength. And even then he got only about two-thirds of it back. Nobody said anything, and the captain went away. I think he is becoming disheartened. . . . Also, to be fair, there is another word of praise due to this ship's library: it contains no copy of the "Vicar of

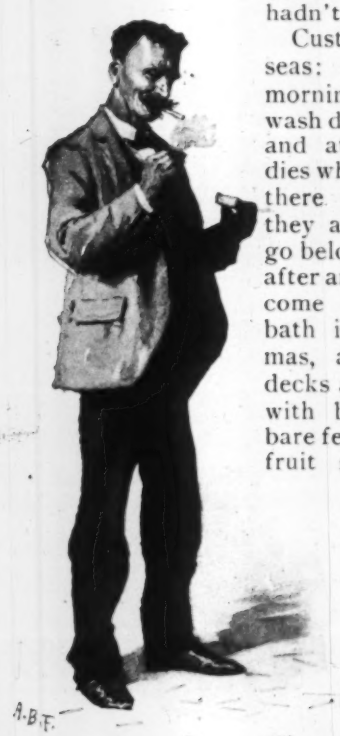


"THE MATE'S SHADOW FROZE FAST TO THE DECK."

"Every shade of complexion."

Wakefield," that strange menagerie of complacent hypocrites and idiots, of theatrical cheap-john heroes and heroines who are always showing off, of bad people who are not interesting and good people who are fatiguing. A singular book! Not a sincere line in it, and not a character that invites respect; a book which is one long waste-pipe discharge of goody-goody puerilities and dreary moralities; a book which is full of pathos which revolts and humor which grieves the heart. There are few things in literature that are more piteous, more pathetic, than the celebrated "humorous" incident of Moses and the spectacles.

Jane Austin's books, too, are absent from this library. Just that one omission alone would make a fairly good library out of a library that hadn't a book in it.



"Only one match in sixteen will light."

Customs in tropic seas: At five in the morning they pipe to wash down the decks, and at once the ladies who are sleeping there turn out, and they and their beds go below. Then one after another the men come up from the bath in their pajamas, and walk the decks an hour or two with bare legs and bare feet. Coffee and fruit served. The ship cat and her kitten now appear and get about their toilets; next the barber comes and flays us on the breezy deck. Breakfast at 9:30, and the day begins. I do not know how a day could be more reposeful; no motion; a level blue sea; nothing in sight from horizon to horizon; the speed of the ship furnishes a cooling breeze; there is no mail to read and answer; no newspapers to excite you; no telegrams to fret you or fright you—the world is far, far away; it has ceased to exist for you—seemed a fading dream, along in the first days; has dissolved to an unreality now; it is gone from your mind with all its businesses and ambitions, its prosperities and disasters, its exultations and despairs, its joys and griefs and cares and worries. They are no concern of yours any more; they have gone out of your life; they are a storm which has passed and left a deep calm behind. The people group themselves about the decks in their snowy white linen, and read, smoke, sew, play cards, talk, nap, and so on. In other ships the passengers are always ciphering about when they are going to arrive; out in these seas it is rare, very rare, to hear that subject broached. In other ships there is always an eager rush to the bulletin board at noon to find out what the "run" has been; in these seas the bulletin seems to attract no interest; I have seen no one visit it; in thirteen days I have visited it only once. Then I happened to notice the figures of the day's run. On that day there happened to be talk, at dinner, about the speed of modern ships. I was the only passenger present who knew this ship's gait. Necessarily the Atlantic custom of betting on the ship's run is not a custom here—nobody ever mentions it.

I myself am wholly indifferent as to when we are going to "get in;" if any one else feels interested in the matter he has not indicated it in my hearing. If I had my way we should never get in at all. This sort of sea life is charged with an indestructible charm. There is no weariness, no fatigue, no worry, no responsibility, no work, no depression of spirits.

"Every shade of complexion."

There is nothing like this serenity, this comfort, this peace, this deep contentment, to be found anywhere on land. If I had my way I would sail on forever and never go to live on the solid ground again.

One of Kipling's ballads has delivered the aspect and sentiment of this bewitching sea correctly:

"The Injian Ocean sets an' smiles
So sof', so bright, so bloomin' blue;
There aren't a wave for miles an' miles
Excep' the jiggle from the screw."

April 14th.—It turns out that the astronomical apprentice worked off a section of the Milky Way on me for the Magellan Clouds. A man of more experience in the business showed one of them to me last night. It was small and faint and delicate, and looked like the ghost of a bunch of white smoke left floating in the sky by an exploded bombshell.

Wednesday, April 15th, Mauritius.—Arrived and anchored off Port Louis two A.M. Rugged clusters of crags and peaks, green to their summits; from their bases to the sea a green plain with just tilt enough to it to make the water drain off. I believe it is in 56 E. and 22 S.—a hot, tropical country. The green plain has an inviting look; has scattering dwellings nestling among the greenery. Scene of the sentimental adventure of Paul and Virginia.

The wettest climate on earth.

Island under French control—which means a community which depends upon quarantines for its health, not upon sanitation.

Thursday, April 16th.—Went ashore in the forenoon at Port Louis—a little town, but with the largest variety of nationalities and complexions we have encountered yet: French, English, Chinese, Arabs, Africans with wool, blacks with straight hair, East Indians, half-whites, quadroons—and great varieties in costumes and colors.

Took the train for Curepipe at 1:30—two hours' run, gradually up hill. What a contrast, this frantic luxuriance of vegetation, with the arid plains of India; these architecturally picturesque crags and knobs and miniature mountains, with the monotony of the Indian dead-levels!

A native pointed out a handsome swarthy man of grave and dignified bearing, and said in an awed tone, "That is So-and-so; has held office of one sort or another under this government for thirty-seven years—he is known all over this whole island—and in the other countries of the world perhaps—who knows? One thing is certain; you can speak his name anywhere in this whole island, and you will find not one grown person that has not heard it. It is a wonderful thing to be so celebrated; yet look

at him; it makes no change in him; he does not even seem to know it."

Curepipe (means Pincushion, or Pegtown, probably).—Sixteen miles (two hours) by rail from Port Louis. At each end of every roof and on the apex of every dormer window a wooden peg two feet high stands up; in some cases its top is blunt, in others the peg is sharp and looks like a toothpick. The passion for this humble ornament is universal.

Apparently there has been only one prominent event in the history of Mauritius, and that one didn't happen. I refer to the romantic sojourn of Paul and Virginia here. It was that story that made Mauritius known to the world, made the name familiar to everybody, the geographical position of it to nobody.

A clergyman was asked to guess what was in a box on a table. It was a vellum fan painted with the shipwreck, and was "*one of Virginia's wedding gifts.*"

April 18th.—This is the only country in the world where the stranger is not asked "How do you like this place?" This is indeed a large distinction. Here the citizen does the talking about the country himself; the stranger is not asked to help. You get all sorts of information. From one citizen you gather the idea that Mauritius was made first, and then heaven; and that heaven was copied after Mauritius.

Another one tells you that this is an exaggeration; that the two chief villages, Port Louis and Curepipe, fall short of heavenly perfection; that nobody lives in Port Louis except upon compulsion, and that Curepipe is the wettest and rainiest place in the world. An English citizen said:

"In the early part of this century Mauritius was used by the French as a basis from which to operate against England's Indian merchantmen; so England captured the island and also the neighbor, Bourbon, to stop that annoyance. England gave Bourbon back; the government in London did not want any more possessions in the West Indies. If the government had had a better quality of geography in stock it would not have wasted Bourbon in that foolish way. A big war will temporarily shut up the Suez Canal some day, and the English ships will have to go to India around the Cape of Good Hope again; then England will have to have Bourbon and will take it.

"Mauritius was a crown colony until twenty years ago, with a governor appointed by the crown and assisted by a council appointed by himself; but Pope Hennessey came out as governor then, and he worked hard to get a part of the council made elective, and succeeded. So now the whole council is French, and in all ordinary matters of legislation they vote together and in the French interest, not the English. The English population is very slender; it has not votes enough to elect a legislator. Half a dozen rich French families elect the legislature. Pope Hennessey was an Irishman, a Catholic, a Home Ruler M. P., a hater of England and the English, a very troublesome person, and a serious incumbrance at Westminster. So it was decided to send him out to govern unhealthy countries, in the hope that something would happen to him. But nothing did. The first experiment was not merely a failure, it was more than a failure. He proved to be more of a disease himself than any he was sent to encounter. The next experiment was here. The dark scheme failed again. It was an off season, and there was nothing but measles here at the time. Pope Hennessey's health was not affected. He worked with the French and for the French and against the English, and he made the English very tired and the French very happy, and lived to have the joy of seeing the flag he served publicly hissed. His memory is held in worshipful reverence and affection by the French.

"It is a land of extraordinary quarantines. They quarantine a ship for anything or for nothing; quarantine her for twenty and even thirty days. They once quarantined a ship because her captain had had the smallpox when he was a boy. That and because he was English.

"The population is very small; small to insignificance. The majority is East Indian; then mongrels; then negroes (descendants of the slaves of the French

"THE BARBER . . . FLAYS US ON THE BREEZY DECK."

times); then French, then English. There was an American, but he is dead or mislaid. The mongrels are the result of all kinds of mixtures; black and white, mulatto and white, quadroon and white, octoroon and white. And so there is every shade of complexion; ebony, old mahogany, horse-chestnut, sorrel, molasses-candy, clouded amber, clear amber, old-ivory white, new-ivory white, fish-belly white—this latter the leprous complexion frequent with the Anglo-Saxon long resident in tropical climates.

"You wouldn't expect a person to be proud of being a Mauritian, now, would you? But it is so. The most of them have never been out of the island, and haven't read much or studied much; they think the world consists of three principal countries—Judea, France, and Mauritius; so they are very proud of belonging to one of the three grand divisions of the globe. They think that Russia and Germany are in England, and that England does not amount to much. They have heard vaguely about the United States and the equator, but they think both of them are monarchies. They think Mount Peter Botte is the highest mountain in the world, and if you show one of them a picture of Milan Cathedral, he will swell up with satisfaction and say that the idea of that jungle of spires was stolen from the forest of pegtops and toothpicks that makes the roofs of Curepipe look so fine and prickly.

"There is not much trade in books. The newspapers educate and entertain the people. Mainly the latter. They have two pages of large-print reading matter—one of them English, the other French. The English page is a translation of the French one. The typography is super-extra primitive; in this quality it has not its equal anywhere. There is no proof-reader now; he is dead.

"Where do they get matter to fill up a

page in this little island lost in the wastes of the Indian Ocean? Oh, Madagascar. They discuss Madagascar and France. That is the bulk. Then they chock up the rest with advice to the government. Also, slurs upon the English administration. The papers are all owned and edited by creoles—French.

"The language of the country is French. Everybody speaks it—has to. You have to know French—particularly mongrel French, the patois spoken by Tom, Dick, and Harry of the multiform complexions—or you can't get along.

"This was a flourishing country in former days, for it made then and still makes the best sugar in the world; but first the Suez Canal severed it from the world and left it out in the cold, and next the beet root sugar, helped by bounties, captured the European markets. Sugar is the life of Mauritius, and it is losing its grip. Its downward course was checked by the depreciation of the rupee—for the planter pays wages in rupees, but sells his crop for gold—and the insurrection in Cuba and paralyzation of the sugar industry there have given our prices here a life-saving lift; but the outlook has nothing permanently favorable about it. It takes a year to mature the canes—on the high ground, three and six months longer—and there is always a chance that the annual cyclone will rip the profit out of the crop. In recent times a cyclone took the whole crop, as you may say; and the island never saw a finer one. Some of the noblest sugar estates in the island are in deep difficulties. A dozen of them are investments of English capital; and the companies that own them are at work now trying to settle up and get out with a saving of half the money they put in. You know, in these days, when a country begins to introduce the tea culture, it means that its own specialty has gone back on it. Look at Bengal; look at Ceylon. Well, they've begun to introduce the tea culture *here*.

"Many copies of 'Paul and Virginia' are sold every year in Mauritius. No other book is so popular here except the Bible. By many it is supposed to be a part of the Bible. All the missionaries work up their French on it when they come here to pervert the Catholic mongrel. It is the greatest story that was ever written about Mauritius, and the only one."

"The third year they do not gather shells."

II.

The principal difference between a cat and a lie is that the cat has only nine lives.—*Pudd'nhead Wilson's New Calendar.*

April 20th.—The cyclone of 1892 killed and crippled hundreds of people; it was accompanied by a deluge of rain which drowned Port Louis and *produced a water famine.* Quite true; for it burst the reservoir and the water-pipes; and for a time after the flood had disappeared there was much distress from want of water.

This is the only place in the world where *no* breed of matches can stand the damp. Only one match in sixteen will light.

The roads are hard and smooth; some of the compounds are spacious, some of the bungalows commodious, and the roadways are walled by tall bamboo hedges, trim and green and beautiful; and there are azalea hedges, too, both the white and the red. I never saw that before.

As to healthiness: I translate from today's (April 20th) "Merchants' and Planters' Gazette," from the article of a regular contributor, "Carminge," concerning

The cyclone.

the death of the nephew of a prominent citizen.

"Sad and lugubrious existence, this which we lead in Mauritius; I believe there is no other country in the world where one dies more easily than among us. The least indisposition becomes a mortal malady; a simple headache develops into meningitis; a cold into pneumonia, and presently, when we are least expecting it, death is a guest in our home."

This daily paper has a meteorological report which tells you what the weather was day before yesterday.

One is never pestered by a beggar or a peddler in this town, so far as I can see. This is pleasantly different from India.

April 22d.—To such as believe that the quaint product called French civilization would be an improvement upon the civilization of New Guinea and the like, the snatching of Madagascar and the laying on of French civilization there will be fully justified. But why did England allow the French to have Madagascar? Did she respect a theft of a couple of centuries ago? Dear me, robbery by European nations of each other's territories has never been a sin, is not a sin to-day. To the several cabinets the several political establishments of the world are clothes-lines; and a large part of the official duty of these cabinets is to keep an eye on each other's wash and grab what they can of it as opportunity offers. All the territorial possessions of all the political establishments in the earth—including America, of course—consist of pilferings from other people's wash. No tribe, howsoever insignificant, and no nation, howsoever mighty, occupies a foot of land that was not stolen. When the English, the French, and the Spaniards reached America, the Indian tribes had been raiding each other's territorial clothes-lines for ages, and every acre of ground in the continent had been stolen and re-stolen five hundred times. The English, the French, and the Spaniards went to work and stole it all over again; and when that was satisfactorily accomplished they went diligently to work and stole it from each other. In Europe and Asia and Africa every acre of ground has been stolen several millions of times. A crime persevered in a thousand centuries ceases to be a crime, and becomes a virtue. This is the law of custom, and custom supersedes all other forms of law. Christian governments are as frank to-day, as open and above-board, in discussing projects for raiding each other's clothes-lines as ever they were before the golden rule came smiling into this inhospitable world and couldn't get a night's lodging anywhere. In one hundred and fifty years England has beneficently retired garment after garment from the Indian lines, until there is hardly a rag of the original wash left dangling anywhere. In eight hundred years an obscure tribe of Muscovite savages has risen to the dazzling position of land-robber-in-chief; she found a quarter of the world hanging out to dry on a hundred parallels of lati-

Resting in Europe.

tude, and she scooped in the whole wash. She keeps a sharp eye on a multitude of little lines that stretch along the northern boundaries of India, and every now and then she snatches a hip-rag or a pair of pajamas. It is England's prospective property, and Russia knows it; but Russia cares nothing for that. In fact, in our day, land-robbery, claim-jumping, is become a European governmental frenzy. Some have been hard at it in the borders of China, in Burma, in Siam, and the islands of the sea; and *all* have been at it in Africa. Africa has been as coolly divided up and portioned out among the gang as if they had bought it and paid for it. And now straightway they are beginning the old game again—to steal each other's grabbings. Germany found a vast slice of Central Africa with the English flag and the English missionary and the English trader scattered all over it, but with certain formalities neglected—no signs up, "Keep off the grass," "Trespassers forbidden," etc.—and she stepped in with a cold, calm smile, and put up the signs herself, and swept those English pioneers promptly out of the country.

There is a tremendous point there. It can be put into the form of a maxim: Get your formalities right—never mind about the moralities.

It was an impudent thing, but England had to put up with it. Now, in the case of Madagascar, the formalities had originally been observed, but by neglect they had fallen into desuetude ages ago. England should have snatched Madagascar from the French clothes-line. Without an effort she could have saved those harmless natives from the calamity of French civilization, and she did not do it. Now it is too late.

The signs of the times show plainly enough what is going to happen. All the savage lands in the world are going to be brought under subjection to the Christian governments of Europe. I am not sorry, but glad. This coming fate might have been a calamity to those savage peoples two hundred years ago, but now it will in some cases be a benefaction. The sooner the seizure is consummated, the better for the savages. The dreary and dragging ages of bloodshed and disorder and oppression will give place to peace and order and the reign of law. When one considers what India was under her Hindoo and Mohammedan rulers, and what she is now; when he remembers the miseries of her millions then and the protections and humanities which they enjoy now, he must concede that the most fortunate thing that has ever befallen that empire was the establishment of British supremacy there. The savage lands of the world are to pass to alien possession, their peoples to the mercies of alien rulers. Let us hope and believe that they will all benefit by the change. . . .

April 23d.—"The first year they gather shells; the second year they gather shells and drink; the third year they do not gather shells." (Said of immigrants to Mauritius.) . . . What there is of Mauritius is beautiful. You have undulating, wide expanses of sugar cane—a fine, fresh green

and very pleasant to the eye; and everywhere else you have a ragged luxuriance of tropic vegetation of vivid greens of varying shades, a wild tangle of underbrush, with graceful tall palms lifting their plumes high above it; and you have stretches of shady, dense forest with limpid streams frolicking through them, continually glimpsed and lost and glimpsed again in the pleasantest hide-and-seek fashion; and you have some tiny mountains, some quaint and picturesque groups of toy peaks, and a dainty little vest-pocket Matterhorn; and here and there and now and then a strip of sea with a white ruffle of surf breaks into the view.

That is Mauritius; and pretty enough. The details are few. The massed result is charming, but not imposing; not riotous, not exciting; it is a Sunday landscape. Perspective, and the enchantments wrought by distance, are wanting. There are no distances; there is no perspective, so to speak. Fifteen miles as the crow flies is the usual limit of vision. Mauritius is a garden and a park combined. It affects one's emotions as parks and gardens affect them. The surfaces of one's spiritual deeps are pleasantly played upon, the deeps themselves are not reached, not stirred. Spaciousness, remote altitudes, the sense of mystery which haunts apparently inaccessible mountain domes and summits reposing in the sky—these are the things which exalt the spirit and move it to see visions and dream dreams.

The Sandwich Islands remain my ideal of the perfect thing in the matter of tropical islands. I would add another story to Mauna Loa's sixteen thousand feet if I could, and make it particularly bold and steep and craggy and forbidding and snowy; and I would make the volcano spout its lava-floods out of its summit instead of its sides; but aside from these non-essentials, I have no corrections to suggest. I hope these will be attended to; I do not wish to have to speak of it again.

III.

When your watch gets out of order you have choice of two things to do: throw it in the fire, or take it to the watch-tinker. The former is the quickest.—*Pudd'nhead Wilson's New Calendar.*

The "Arundel Castle" is the finest boat I have seen in these seas. She is thor-

"FIFTEEN OR TWENTY AFRICANDERS . . . SAT UP SINGING ON THE AFTERDECK, IN THE MOONLIGHT, TILL THREE A.M."

oughly modern; and that statement covers a great deal of ground. She has the usual defect, the common defect, the universal defect, the defect that has never been missing from any ship that ever sailed: she has imperfect beds. Many ships have good beds, but no ship has *very* good ones. In the matter of beds all ships have been badly edited, ignorantly edited, from the beginning. The selection of the beds is given to some hearty, strong-backed, self-made man, when it ought to be given to a frail woman accustomed from girlhood to backaches and insomnia. Nothing is so rare, on either side of the ocean, as a perfect bed, nothing is so difficult to make. Some of the hotels on both sides provide it, but no ship ever does or ever did. In Noah's Ark the beds were simply scandalous. Noah set the fashion, and it will endure in one degree of modification or another till the next flood.

8 A.M. — Passing Isle de Bourbon. Broken-up sky-line of volcanic mountains in the middle. Surely it would not cost much to repair them, and it seems inexcusable neglect to leave them as they are.

It seems stupid to send tired men to Europe to rest. It is no proper rest for the mind to clatter from town to town, in the dust and cinders, and examine galleries and architecture and be always meeting people and lunching and teaing and dining, and receiving worrying cables and letters. And a sea voyage on the Atlantic is of no use—voyage too short, sea too rough. The peaceful Indian and Pacific oceans and the long stretches of time are the healing thing.

May 2d, A.M.—A fair, great ship in sight—almost the first we have seen in these weeks of lonely voyaging. . . .

Last night the burly chief engineer, middle-aged, was standing telling a spirited seafaring tale, and had reached the most exciting place—where a man overboard was washing swiftly astern on the great seas and uplifting despairing cries, everybody racing aft in a frenzy of excitement and fading hope—when the band, which had been silent a moment, began impressively its closing piece, the English national anthem. As simply as if he was unconscious of what he was doing, he stopped his story, uncovered, laid his laced cap against his breast, and slightly bent his grizzled head; the few bars finished, he put on his cap and took up his tale again as naturally as if that interjection of music had been a part of it. There was something touching and fine about it, and it was moving to reflect that he was one of a myriad, scattered over every part of the globe, who by turn were doing as he was doing, every hour of the twenty-four—those awake doing it while the others slept—those impressive bars forever float-

"FIFTY INDIANS AND CHINAMEN SLEEP IN A BIG TENT IN THE WAIST OF THE SHIP FORWARD."

ing up out of the various climes, never silent and never lacking reverent listeners.

All that I remember about Madagascar is that Thackeray's little Billee went up to the top of the mast and there knelt him upon his knee, saying,

> I see
> Jerusalem and Madagascar,
> And North and South Amerikee.

May 3d, Sunday.—Fifteen or twenty Africanders who will end their voyage to-day and strike for their several homes from Delagoa Bay to-morrow, sat up singing on the afterdeck in the moonlight till 3 A.M. Good fun and wholesome. And the songs were clean songs, and some of them were hallowed by their tender associations. Finally, in a pause, a man asked if they had heard a certain old and an altogether lowly anecdote. It was a discord, a wet blanket. The men were not in the mood for humorous dirt. The songs had carried them to their homes, and in spirit they sat by those far hearthstones and saw faces and heard voices other than those that were about them. The poor man hadn't wit enough to see that he had blundered, but asked his question again. Again there was no response. It was embarrassing for him. In his confusion he chose the wrong course, did the wrong thing—began the anecdote. Began it in a deep and hostile stillness, where had been such life and stir and warm comradeship before. The two rows of men sat like statues. There was no movement, no sound. He *had* to go on; there was no other way—at least none that an animal of his caliber could think of. When at last he finished his tale, which is wont to fetch a crash of laughter, not a ripple of sound resulted. It was as if the tale had been told to dead men. After what seemed a long, long time, somebody sighed, somebody else stirred in his seat; presently the men dropped into a low murmur of confidential talk, each with his neighbor, and the incident was closed. There were indications that that man was fond of his anecdote; that it was his pet, his standby, his shot that never missed, his reputation-maker. But he will never tell it again. No doubt he will think of it sometimes, for that cannot well be helped; and then he will see a picture—and always the same picture: the double rank of dead men; the vacant deck stretching away in dimming perspective beyond them, the wide desert of smooth sea all abroad; the rim of the moon spying from behind a rag of black cloud; the remote top of the mizzenmast shearing a zigzag path through the field of stars in the deeps of space; and this soft picture will remind him of the time that he sat in the midst of it and told his poor little tale and felt *so* lonesome when he got through.

"MOST OF THEM ARE EXACTLY LIKE THE NEGROES OF THE SOUTHERN STATES—ROUND FACES, FLAT NOSES."

Fifty Indians and Chinamen sleep in a big tent in the waist of the ship forward; they lie side by side with no space between; the former wrapped up, head and all, as in the Indian streets; the Chinamen uncovered; the lamp and things for opium-smoking in the center. . . .

Monday, May 4th.—Steaming slowly in the stupendous Delagoa Bay, its dim arms stretching far away and disappearing on both sides. It could furnish plenty of room for all the ships in the world, but it is shoal. The lead has given us three and one-half fathoms several times, and we are drawing that, lacking six inches.

A bald headland—precipitous wall 150 feet high—very strong red color, stretching a mile or so. A man said it was Portuguese blood—battle fought here with the natives last year. I think this doubtful. Pretty cluster of houses on the tableland above the red—and rolling stretches of grass and groups of trees, like England.

The Portuguese have the railroad (one passenger train a day) to the border, seventy miles—then the Netherlands Company have it. Thousands of tons of freight on the shore—no cover. This is

Portuguese all over—indolence, piousness, poverty, impotence.

Crews of small boats and tugs all jet black, woolly heads, and very muscular.

Winter.—The South African winter is just beginning now, but nobody but an expert can tell it from summer. However, I am tired of summer; we have had it unbroken for eleven months. We spent the afternoon on shore, Delagoa Bay. A small town—no sights. No carriages. Three rickshaws, but we couldn't get them—apparently private. These Portuguese are a rich brown, like some of the Indians. Some of the blacks have the long horse-heads and very long chins of the negroes of the picture books; but most of them are exactly like the negroes of our Southern States—round faces, flat noses, good-natured, and easy laughers.

Flocks of black women passed along, carrying outrageously heavy bags of freight on their heads—the quiver of their leg as the foot was planted and the strain exhibited by their bodies showed what a tax upon their strength the load was. They were stevedores, and doing full stevedore's work. They were very erect when unladen—from carrying weights on their heads—just like the Indian women. It gives them a proud, fine carriage.

Sometimes one saw a woman carrying on her head a laden and topheavy basket the shape of an inverted pyramid—its top the size of a soup-plate, its base the diameter of a teacup. It required nice balancing—and got it.

No bright colors; yet there were a good many Hindoos.

The Second Class Passenger came over as usual at "lights out" (eleven), and we lounged along the spacious vague solitudes of the deck and smoked the peaceful pipe and talked. He told me an incident in Mr. Barnum's life which was evidently

"IT'S A FIRST-RATE IDEA. I'LL BUY THE MONUMENT."

characteristic of that great showman in several ways. This was Barnum's purchase of Shakespeare's birthplace, a quarter of a century ago.

The Second Class Passenger was in Jamrach's employ at the time, and knew Barnum well. He said the thing began in this way. One morning Barnum and Jamrach were in Jamrach's little private snuggery back of the wilderness of caged monkeys and snakes and other commonplaces of Jamrach's stock in trade, refreshing themselves after an arduous stroke of business, Jamrach with something orthodox, Barnum with something heterodox—for Barnum was a teetotaler. The stroke of business was in the elephant line. Jamrach had contracted to deliver to Barnum in New York eighteen elephants for $360,000, in time for the next season's opening. Then it occurred to Mr. Barnum that he needed a "card." He suggested Jumbo. Jamrach said he would have to think of something else—Jumbo couldn't be had; the Zoo wouldn't part

with that elephant. Barnum said he was willing to pay a fortune for Jumbo if he could get him. Jamrach said it was no use to think about it; that Jumbo was as popular as the Prince of Wales, and the Zoo wouldn't dare to sell him; all England would be outraged at the idea; Jumbo was an English institution; he was part of the national glory; one might as well think of buying the Nelson monument. Barnum spoke up with vivacity and said:

"It's a first-rate idea. *I'll buy the monument.*"

Jamrach was speechless for a second. Then he said, like one ashamed:

"You caught me. I was napping. For a moment I thought you were in earnest."

Barnum said pleasantly:

"I *was* in earnest. I know they won't sell it, but no matter. I will not throw away a good idea for all that. All I want is a big advertisement. I will keep the thing in mind, and if nothing better turns up I will offer to buy it. That will answer every purpose. It will furnish me a couple of columns of gratis advertising in every English and American paper for a couple of months, and give my show the biggest boom a show ever had in this world."

Jamrach started to deliver a burst of admiration, but was interrupted by Barnum, who said:

"Here is a state of things! England ought to blush."

His eye had fallen upon something in the newspaper. He read it through to himself; then read it aloud. It said that the house that Shakespeare was born in at Stratford-on-Avon was falling gradually to ruin through neglect; that the room where the poet first saw the light was now serving as a butcher's shop; that all appeals to England to contribute money (the requisite sum stated) to buy and repair the house and place it in the care of salaried and trustworthy keepers had fallen resultless. Then Barnum said:

"There's my chance. Let Jumbo and the monument alone for the present—they'll keep. I'll buy Shakespeare's house. I'll set it up in my museum in New York, and put a glass case around it and make a sacred thing of it; and you'll see all America flock there to worship; yes, and pilgrims from the whole earth; and I'll make them take their hats off, too. In America we know how to value anything that Shakespeare's touch has made holy. You'll see!"

In conclusion the S. C. P. said:

"That is the way the thing came about. Barnum did buy Shakespeare's house. He paid the price asked, and received the properly attested documents of sale. Then there was an explosion, I can tell you. England rose! What, the birthplace of the master genius of all the ages and all the climes—that priceless possession of Britain—to be carted out of the country like so much old lumber and set up for sixpenny desecration in a Yankee show-shop! The idea was not to be tolerated for a moment. England rose in her indignation, and Barnum was glad to relinquish his prize and offer apologies. However, he stood out for a compromise; he claimed a concession—England must let him have Jumbo. And England consented, but not cheerfully."

It shows how, by help of time, a story can grow—even after Barnum has had the first innings in the telling of it. Mr. Barnum told me the story himself, years ago. He said that the permission to buy Jumbo was not a concession; the purchase was made and the animal delivered before the public knew anything about it; also, that the securing of Jumbo was all the advertisement he needed. It produced many columns of newspaper talk free of cost, and he was satisfied. He said that if he had failed to get Jumbo he would have caused his notion of buying the Nelson monument to be treacherously smuggled into print by some trusty friend, and after he had gotten a few hundred pages of gratuitous advertising out of it, he would have come out with a blundering, obtuse, but warm-hearted letter of apology, and in a postscript to it would have naïvely proposed to let the monument go and take Stonehenge in place of it at the same price.

It was his opinion that such a letter, written with well-simulated asinine innocence and gush, would have gotten his ignorance and stupidity an amount of newspaper abuse worth six fortunes to him and not purchasable for twice the money.

I knew Mr. Barnum well, and I placed every confidence in the account which he gave me of the Shakespeare birthplace episode. He said he found the house neglected and going to decay, and he inquired into the matter, and was told that many times earnest efforts had been made to raise money for its proper repair and preservation, but without success. He then proposed to buy it. The proposition was entertained, and a price named—$50,000, I think; but whatever it was, Barnum paid

the money down, without remark, and the papers were drawn up and executed. He said that it had been his purpose to set up the house in his museum, keep it in repair, protect it from name-scribblers and other decorators, and leave it by bequest to the safe and perpetual guardianship of the Smithsonian Institution at Washington. But as soon as it was found that Shakespeare's house had passed into foreign hands and was going to be carried across the ocean, England was stirred as no appeal from the custodians of the relic had ever stirred her before, and protests came flowing in—and money, too,—to stop the outrage. Offers of re-purchase were made—offers of double the money that Mr. Barnum had paid for the house. He handed the house back, and took only the sum which it had cost him—but on the condition that an endowment sufficient for the future safeguarding and maintenance of the sacred relic should be raised. This condition was fulfilled.

That was Barnum's account of the episode; and to the end of his days he claimed with pride and satisfaction that not England, but America—represented by him—saved the birthplace of Shakespeare from destruction.

At three P.M., May 6th, the ship slowed down, off the land, and thoughtfully and cautiously picked her way into the snug harbor of Durban, South Africa.*

THE GOVERNMENT COLLECTION OF CIVIL WAR PHOTOGRAPHS.

By General A. W. Greely.

IN its progress the American civil war was marked by the application to its use and benefit of many phases of industrial evolution that had hitherto been unemployed in the art of war. One of the most interesting for the future historian was the utilization of photography. Fortunately for historical students there has been concentrated, arranged, and catalogued, in the War Department Library, more than eight thousand photographs relating to the civil war, which are the property of the United States. Of these more than six thousand are represented by negatives. Inasmuch as McClure's Magazine has been the first to thoroughly examine these photographs for historical purposes, under permission of Secretary of War Russell A. Alger, and will present many of them to its readers in connection with the reminiscences of the former Assistant Secretary of War, Charles A. Dana, one of the ablest and most active officials of the war period, it may be of interest to its readers to know the story of the aggregation of these photographs and of the vicissitudes which nearly caused their total loss to the world.

These negatives and photographs were brought together in the War Department Library in 1894, under an order of Secretary of War Lamont, reorganizing certain divisions of the War Department, which directed that collections of photographs of any bureau of the War Department, not used in the administrative work thereof, should be transferred to the War Department Library. As a result there are now in the files of the War Department Library 8,115 photographs, ranging in size from three by four inches to seventeen by twenty inches.

While fewest in number, yet, from their official character, the most important photographs are those contributed by the Corps of Engineers and the Quartermaster's Department. The Quartermaster's photographs, over a thousand in number, illustrate not only the multifarious operations and activities of this great department, but also of other army bureaus. We find represented bakeries, hospitals, stables, warehouses, barracks, conscript camps, prisoners' quarters, signal towers, convalescent camps, draft rendezvous, gunboats, refugee camps and quarters, contraband quarters, hospitals, and camps, rolling-mills, shipyards, waterworks—in short, nearly every phase of the operations in the rear of or accessory to a great

* Editor's Note.—These chapters (copyright, 1897, by Olivia L. Clemens) are from a forthcoming book by Mark Twain, entitled "Following the Equator," and are published here by special arrangement with the American Publishing Co., of Hartford, Conn. They constitute the only account of any part of Mark Twain's recent journey around the world that will appear in periodical form, and all rights are expressly reserved. The book will be sold only by subscription, and its sale in New York and the vicinity is under the exclusive control of the Doubleday and McClure Company.

army. There is an extended series of views of gunboats and transports, and a very valuable one showing the operation, construction, and repair of military railways as conducted by the Railway Division of the Quartermaster's Department. These photographs exhibit experimental bridges, the manner of straightening bent rails, of various expedients for crossing streams, of barges carrying freight cars, with appliances for loading and unloading, from which originated the great transfer railway ferryboats, which are still peculiar to America only. The Adjutant-General's photographs consist of nearly seven hundred portraits of distinguished officers who served in the war. Very few of these photographs have ever been reproduced, the collection not being accessible until now. Among views obtained from private sources the most important collection is that belonging to Captain W. C. Margedant, about fifty views of Chattanooga and its surroundings in 1863–64.

Far the greater number, and those possessing the greatest popular interest, are contained in the views and negatives known as the Brady war photographs. The Brady collection covers the operations of the war in the District of Columbia, Georgia, Maryland, New York, Pennsylvania, South Carolina, Tennessee, and Virginia. It also comprises photographs of Presidents Lincoln and Johnson, and their cabinets, senators and members of the House of Representatives, judges, many distinguished citizens, and a large number of military and naval officers. Secretary of War William W. Belknap purchased for the War Department in July, 1874, a large number of photographic negatives of war views and portraits of prominent men. The government secured a perfect title to the entire collection in April, 1875, at an aggregate expense of nearly $28,000.

For nearly twenty years subsequent to the passing of these negatives into the possession of the United States, the story of the Brady war photographs is practically one of neglect or misfortune. Intrusted to the care of subordinate officials, who were either indifferent to or ignorant of the value and interest of the collection, it suffered to an extraordinary degree from the lack of proper care in handling. Passing from one official to another, it was nearly ten years before any attempt was made to make a list of the six thousand negatives. Meanwhile, for various official and historical purposes, free and unguarded access was allowed to the negatives, which naturally suffered from inexperienced and careless handling. Many negatives were broken, some defaced by handling, some destroyed by neglect and exposure, while others were lost.

When in 1894 Secretary Lamont ordered that the civil war photographs be grouped and catalogued, the labor of identification, cleaning, repairing, and putting beyond the possibility of further damage of this Brady collection seemed at first a hopeless task; but fortunately, after a period of three years, this has been in a measure done, except three hundred unidentified negatives. The perfected work is now, through a published catalogue of the War Department, in such shape as to be available to historical students, and the original negatives of the various collections, in dust-proof envelopes, have been so arranged, classified, and stored that any one of them is immediately accessible.

Future generations, in dwelling on the civil war, must necessarily revert to these war photographs for information and impressions; and, as man is always of greater interest than his environment, the portraits of the prominent actors in this stupendous war must be ever of the greatest value. The wealth of the collection in this direction may be appreciated by the names of a few of the Federal and Confederate commanders, now dead, whose deeds and services have won renown.

Among these are Anderson, Bartlett, Beauregard, Birney, Boggs, Buell, Buford, Burnside, Casey, Corcoran, Combs, Custer, Dahlgren, Davis, Dix, Dupont, Emory, Farragut, Foote, Foster, Frémont, Garfield, Grant, Gregg, Griffin, Hancock, Hazen, Heintzelmann, Hooker, Hunt, "Stonewall" Jackson, Johnston, Kearney, Lee, Logan, McClellan, McPherson, Meade, Morris, Ord, Paulding, the Porters, Rodgers, Rowan, Schenck, Scott, Sedgwick, Sheridan, Sherman, Slocum, Terry, Thomas, and Warren.

In short, there are but few Federal officers of rank and distinction whose lineaments are not preserved in this collection, which in another generation will be considered one of the inestimable treasures of the American nation. The genius of the artist may well be looked to for the delineation of the heroic figures of the American civil war. But it is safe to say that, however beautiful may be these works of art, they can never touch the heart or awaken the imagination as do certain photographs of this collection.

REMINISCENCES OF MEN AND EVENTS OF THE CIVIL WAR.

By Charles A. Dana,

Assistant Secretary of War from 1863 to 1865.

ILLUSTRATED WITH PORTRAITS FROM THE WAR DEPARTMENT COLLECTION OF CIVIL WAR PHOTOGRAPHS.

I.

FROM THE "TRIBUNE" TO THE WAR DEPARTMENT.

I HAD been associated with Horace Greeley on the New York "Tribune" for about fifteen years when, one morning early in April, 1862, Mr. Sinclair, the advertising manager of the paper, came to me saying that Mr. Greeley would be glad to have me resign. I asked one of my associates to find from Mr. Greeley if it was really his wish. In a few hours he came to me saying that I had better go. I stayed the day out, in order to make up the paper and give them an opportunity to find a successor, but I never went into the office after that. I think I owned a fifth of the paper—twenty shares—at that time; this stock my colleagues bought.

Mr. Greeley never gave a reason for dismissing me, nor did I ever ask for one. I know, though, that the real explanation was that while he was for peace I was for war, and that as long as I staid on the "Tribune" there was a spirit there which was not his spirit—that he did not like.

My retirement from the "Tribune" was talked of in the newspapers for a day or two,* and brought me a letter from the Secretary of War, Edwin M. Stanton, saying he would like to employ me in the War Department. I had already met Mr. Lincoln, and had carried on a brief correspondence with Mr. Stanton. My meeting with Mr. Lincoln was shortly after his inauguration. He had appointed Mr. Seward to be his Secretary of State, and some of the Republican leaders of New York who had been instrumental in preventing Mr. Seward's nomination to the Presidency and in securing that of Mr. Lincoln, had begun to fear that they would be left out in the cold in the distribution of the offices. General James S. Wadsworth, George Opdyke, Lucius Robinson, T. B. Carroll, and Henry B. Stanton were among the number of these gentlemen. Their apprehensions were somewhat mitigated by the fact that Mr. Chase, to whom we were all friendly, was Secretary of the Treasury. But, notwithstanding, they were afraid that the superior tact and pertinacity of Mr. Seward and of Mr. Thurlow Weed, Seward's close friend and the political manager of the Republican party, would get the upper hand, and that the power of the Federal administration would

*AN EDITORIAL CHANGE.

It seems to be generally understood, and we believe it is true, that Charles A. Dana, Esq., who has been for the last fifteen years managing editor of the "Tribune," has withdrawn from that position, and dissolved his connection with that journal.

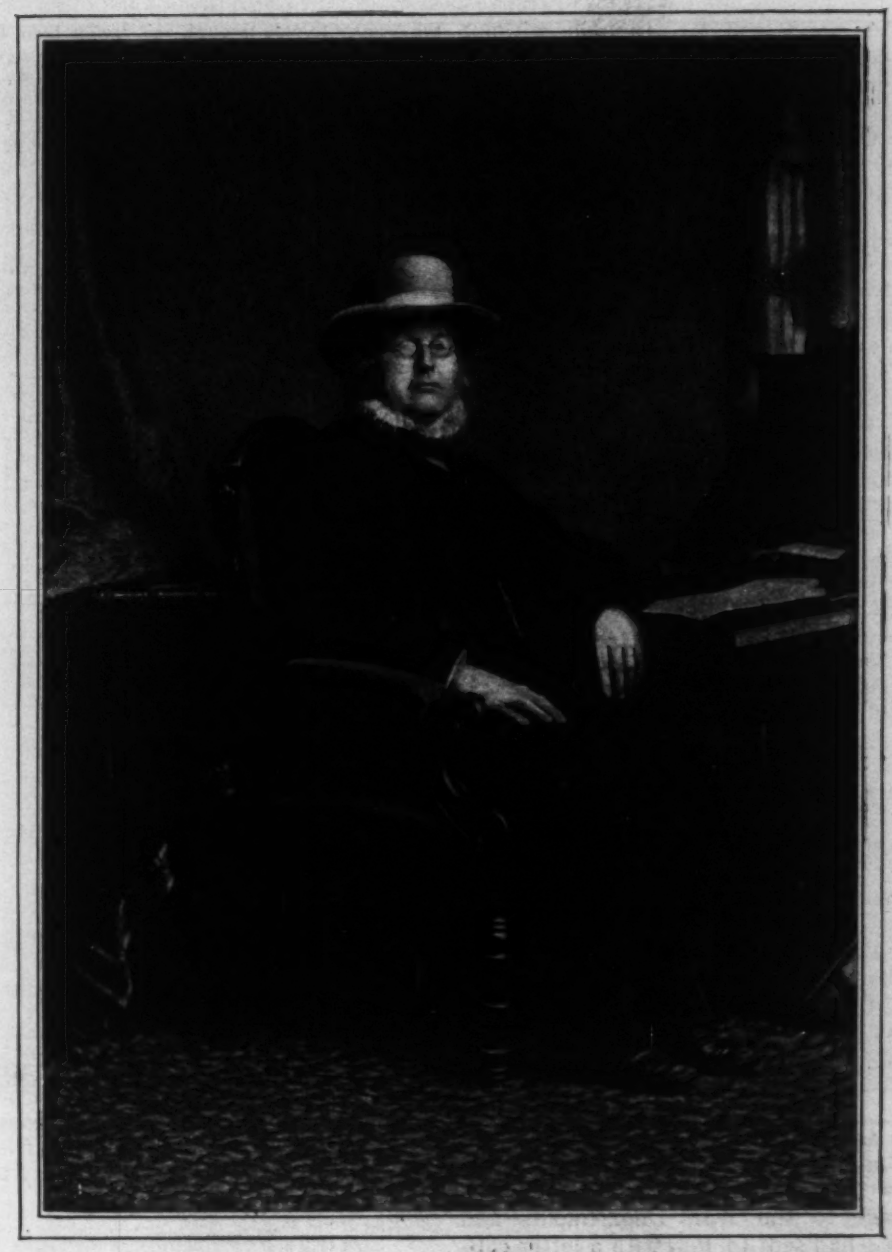
The reasons of this step are not known to us, nor are they proper subjects of public comment.

We presume, however, that Mr. Dana intends to withdraw from journalism altogether and devote himself to the more congenial pursuits of literature. He is one of the ablest and most accomplished gentlemen connected with the newspaper press. The ranks of the profession are not sufficiently crowded with such members to render his departure from it a matter of indifference.

The "Albion" makes the following just and merited notice of this incident:

"The daily press of this city has sustained—for a time at least—a serious loss in the discontinuance of Mr. Charles A. Dana's editorial connection with the 'Tribune.' Differing as we almost invariably have done with the policy and the tenets of that paper, and having been drawn at intervals into controversy with it, we should nevertheless omit both a pleasure and a duty if we failed to put on record our grateful sense of many professional courtesies experienced at Mr. Dana's hands.

"Remembering also that during the palmy days of the New York Press Club, no member of that association was more personally popular than this our genial and scholarly friend, we do but unite, we are sure, with all our brethren in hoping that he will not long absent himself from the ranks. Should he, however, hold aloof from a difficult and thankless office, his taste and abilities are certain to bring him most honorably before the public in some other department of letters. Such as he cannot hide their light under a bushel."—"The Times," New York, April 6, 1862.



HORACE GREELEY IN 1862. AGE 51 YEARS.
Editor of the New York "Tribune" from 1841 to 1872.

be put into the control of the rival faction; accordingly, several of them determined to go to Washington, and I was asked to go with them.

I believe the appointment for our interview with the President was made through Mr. Chase; but, at any rate, we all went up to the White House together, except Mr. Henry B. Stanton, who stayed away because he was himself an applicant for office.

Mr. Lincoln received us in the large room upstairs in the east wing of the White House, where he had his working office, and stood up while General Wadsworth, who was our principal spokesman, and Mr. Opdyke stated what was desired. After the interview was begun, a big Indianian, who was a messenger in attendance in the White House, came into the room and said to the President,

"She wants you."

"Yes, yes," said Mr. Lincoln, without stirring.

Soon afterward the messenger returned again, exclaiming,

"I say she wants you!"

The President was evidently annoyed, but, instead of going out after the messenger, he remarked to us:

"One side shall not gobble up everything. Make out a list of places and men you want, and I will endeavor to apply the rule of give and take."

General Wadsworth answered:

"Our party will not be able to remain in Washington, but we will leave such a list with Mr. Carroll, and whatever he agrees to will be agreeable to us."

Mr. Lincoln continued: "Let Mr. Carroll come in to-morrow, and we will see what can be done."

This is the substance of the interview, and what most impressed me was the evident fairness of the President. We all felt that he meant to do what was right and square in the matter. While he was not the man to promote factious quarrels and difficulties within his party, he did not intend to leave in the lurch the special friends through whose exertions his nomination and election had finally been brought about. At the same time he understood perfectly that we of New York and our associates in the Republican body had not gone to Chicago for the purpose of nominating him, or of nominating any one in particular, but only to beat Mr. Seward, and thereupon to do the best that could be done regarding the selection of the candidate.

FIRST ACQUAINTANCE WITH STANTON.

My acquaintance with Mr. Stanton had come about through an editorial which I had written for the "Tribune" * on his entrance to the War Department, and which I had sent to him with a letter calling his attention to certain facts with which, it seemed to me, the War Department ought to deal. In reply I received the following letter:

WASHINGTON, *January* 24, '62.

My dear Sir:—Yours of the 22d only reached me this evening. The facts you mention were new to me, but there is too much reason to fear they are true. But that matter will, I think, be corrected *very speedily*.

You cannot tell how much obligation I feel myself under for your kindness. Every man who wishes the country to pass through this trying hour should stand on watch, and aid me. Bad passions, and little passions, and mean passions gather around and hem in the great movements that should deliver this nation.

Two days ago I wrote you a long letter—a three pager—expressing my thanks for your admirable article of the 21st, stating my position and purposes; and in that letter I mentioned some of the circumstances of my unexpected appointment. But interrupted before it was completed, I will not inflict, or afflict, you with it.

I know the task that is before us—I say *us* because the "Tribune" has its mission as plainly as I have mine, and they tend to the same end. But I am not in the smallest degree dismayed or disheartened. By God's blessing, we shall prevail. I feel a deep, *earnest* feeling growing up around me. We have no jokes or trivialities; but all with whom I act show that they are now in dead earnest.

I know you will rejoice to know this.

As soon as I can get the machinery of the office working, the rats cleared out, and the rat-holes stopped, we shall *move*. This army has got to fight or run away; and while men are striving nobly in the West, the champagne and oysters on the Potomac must be stopped. But patience for a short while only is all I ask, if you and others like you will rally around me. Yours truly,

EDWIN M. STANTON.

C. A. DANA, ESQ.

A few days after this I wrote Mr. Stanton a second letter, in which I asked him to give General Frémont a chance. At the breaking out of the war Frémont had been made a major-general in the regular army and the command of the Western department had been given him. His campaign in Missouri in the summer of 1861 gave great dissatisfaction, and in November, 1861, he was relieved, after an investigation by the Secretary of War. Since that time he had been without a command. I believed, as did many others, that political intrigue was keeping Frémont back, and I was anxious that he should have fair play, in order that the great mass of people who had supported him for the Presidency in 1856, and who still were his warm friends, might not be dissatisfied. To my letter Mr. Stanton replied:

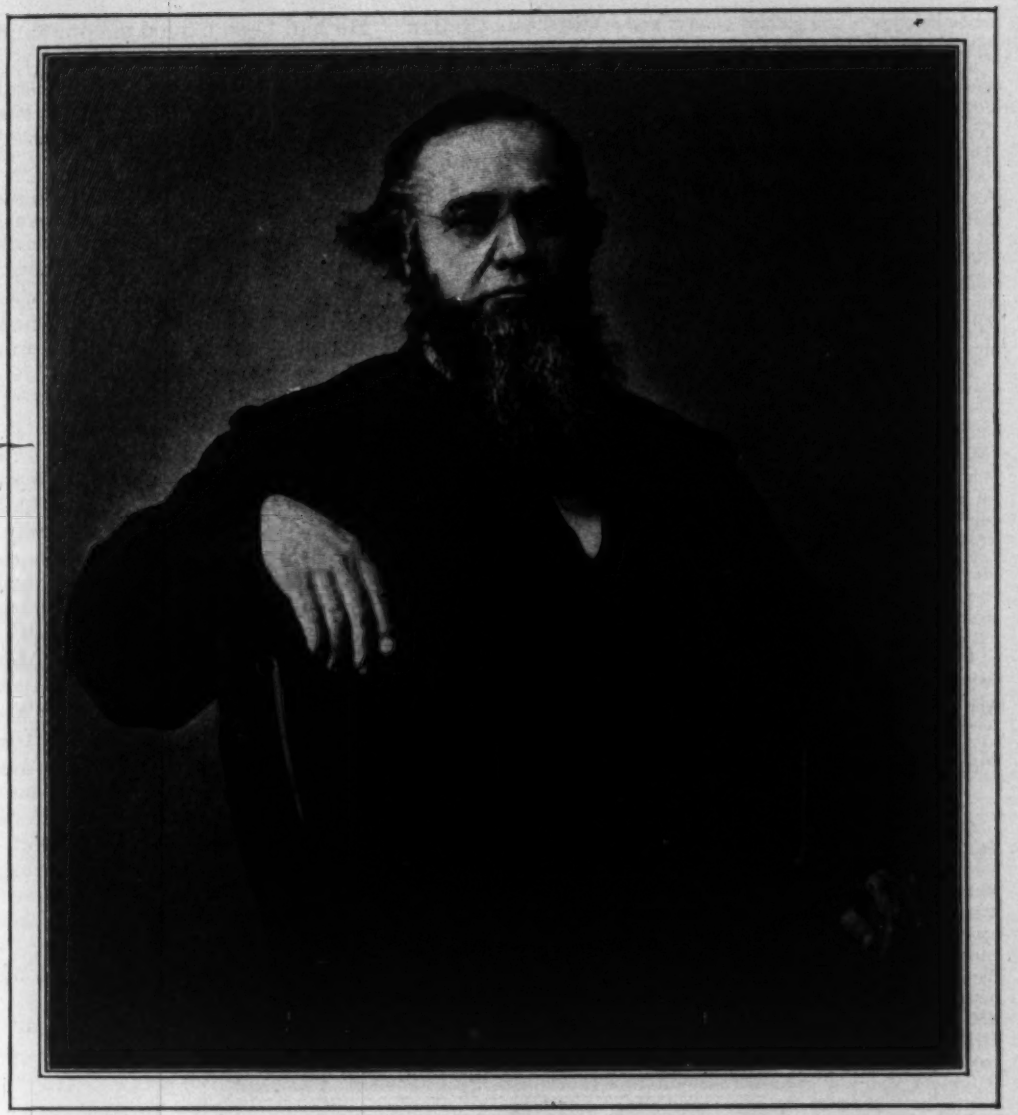
WASHINGTON, *February* 1, '62.

Dear Sir:—If General Frémont has any fight in him he shall (so far as I am concerned) have a chance to show it, and I have told *him* so. The times require the help of every man according to his gifts; and having neither partialities nor grudges to indulge, it will be my aim to practice on the maxim "the tools to him that can handle them."*

There will be serious trouble between Hunter and Lane. What Lane's expedition has in view, how it came to be set on foot, and what is expected to be accomplished by it, I do not know and have tried in vain to find out. It seems to be a haphazard affair that no one will admit himself to be responsible for. But believing that Lane has pluck and is an earnest

* "The New Head of the War Department," New York "Tribune," January 21, 1862. Mr. Stanton became Secretary of War the middle of January, 1862.

* A few weeks later, viz., March 11th, General Frémont was assigned to the command of the "Mountain Department," composed of parts of Virginia, Kentucky, and Tennessee.



EDWIN M. STANTON.
Secretary of War from January, 1862, to May, 1868.

man, he *shall have fair* play. If you know anything about him or his expedition pray tell it to me.

To bring the War Department up to the standard of the times, and work an army of five hundred thousand with machinery adapted to a peace establishment of twelve thousand, is no easy task. This was Mr. Cameron's great trouble, and the cause of much of the complaints against him. All I ask is reasonable time and patience. The pressure of members of Congress for clerk and army appointments, notwithstanding the most stringent rules, and the persistent strain against all measures essential to obtain time for thought, combination, and conference, is discouraging in the extreme—it often tempts me to quit the helm in despair. The only consolation is the confidence and support of good and patriotic men—to their aid I look for strength.

Yours truly, EDWIN M. STANTON.

C. A. DANA, ESQ., "Tribune" Office.

Very soon after Mr. Stanton went into office military affairs were energized, and a forward movement of the armies was apparent. It was followed by several victories, notably those of Fort Henry and Fort Donelson. On different occasions the "Tribune" credited to the head of the War Department this new spirit which seemed to inspire officers and men. Mr. Stanton, fearful of the effect of this praise, sent to the paper the following despatch:

TO THE EDITOR OF THE NEW YORK "TRIBUNE."

Sir:—I cannot suffer undue merit to be ascribed to my official action. The glory of our recent vic-

tories belongs to the gallant officers and soldiers that fought the battles. No share of it belongs to me.

Much has recently been said of military combinations and organizing victory. I hear such phrases with apprehension. They commenced in infidel France with the Italian campaign, and resulted in Waterloo. Who can organize victory? Who can combine the elements of success on the battlefield? We owe our recent victories to the Spirit of the Lord that moved our soldiers to rush into battle and filled the hearts of our enemies with dismay. The inspiration that conquered in battle was in the hearts of the soldiers and from on high; and wherever there is the same inspiration there will be the same results. Patriotic spirit, with resolute courage in officers and men, is a military combination that never failed.

We may well rejoice at the recent victories, for they teach us that battles are to be won now and by us in the same and only manner that they were ever won by any people, or in any age, since the days of Joshua, by boldly pursuing and striking the foe. What, under the blessing of Providence, I conceive to be the true organization of victory and military combination to end this war, was declared in a few words by General Grant's message to General Buckner—"*I propose to move immediately on your works.*"

Yours truly,

EDWIN M. STANTON.

On receiving this I at once wired to our representative in Washington to know if Mr. Stanton meant to "repudiate" the "Tribune." I received my answer from Mr. Stanton himself.

WASHINGTON, *February* 19, '62.

Dear Sir:—It occurred to me that your kind notice of myself might be perverted into a disparagement of the Western officers and soldiers to whom the merit of the recent victories justly belongs, and that it might create an antagonism between them and the head of the War Department. To avoid *that* misconstruction was the object of my despatch—leaving the matter to be determined as to publication to the better judgment of the "Tribune," my own mind not being clear on the point of its expediency. Mr. Hill * called to see me this evening, and from the tenor of your despatch it seemed to me that your judgment did not approve the publication or you would not speak of me as "repudiating" anything the "Tribune" says. On reflection *I am convinced the communication should not be published*, as it might imply an antagonism between myself and the "Tribune." On this, as on any future occasion, I defer to your judgment. We have one heart and mind in this great cause, and upon many essential points you have a wider range of observation and clearer sight than myself; I am therefore willing to be guided by your wisdom.

Yours truly,

EDWIN M. STANTON.

C. A. DANA, ESQ.

On receiving this letter we of course published his telegram at once.†

When Mr. Stanton went into the War Department there was great dissatisfaction in the "Tribune" office with McClellan. He had been placed in command of the Army of the Potomac in the preceding August, and since November 1st had been in command of all the armies of the United States; but while he had proved himself an excellent drill-master, he had, at the same time, proved that he was no general at all. His friends were loyal, however, and whatever success our armies met with was attributed to his generalship.

When the capture of Fort Donelson was announced McClellan's friends claimed that he had directed it by telegraph from his headquarters on the Potomac. Now, the terminus of the telegraph toward Fort Donelson was many miles off from the battlefield. Besides, the absurdity of a general directing the movements of a battle a thousand miles off, even if he had fifty telegraph wires, leading to every part of the field, was apparent. Nevertheless, McClellan's supporters kept up their claim. On February 20th, the Associated Press agent at Washington, in reporting a meeting of a railroad convention at which Mr. Stanton had spoken, said:

"Secretary Stanton, in the course of his address, paid a high compliment to the young and gallant friend at his side, Major-General McClellan, in whom he had the utmost confidence, and the results of whose military schemes, gigantic and well-matured, were now exhibited to a rejoicing country. The secretary, with upraised hands, implored Almighty God to aid them and himself, and all occupying positions under the government, in crushing out this unholy rebellion."

I did not believe Stanton had done any such thing, so I sent the paragraph to him. The secretary replied:

[Private.]

WASHINGTON, *February* 23, '62.

Dear Sir:—The paragraph to which you called my attention was a ridiculous and impudently impertinent effort to puff the general by a false publication of words I never uttered. Sam Barlow, one of the secretaries of the meeting, was its author, as I have been informed. It is too small a matter for *me* to contradict, but I told Mr. Kimlen, the other secretary, that I thought the gentlemen who invited me to be present at their meeting owed it to themselves to see that one of their own officers should not misrepresent what I said. It was for them, and due to their own honor, to see that an officer of the government might communicate with them in safety. And if it was not done, I should take care to afford no other opportunity for such practices.

The fact is that the agents of the Associated Press and a gang around the Federal Capitol appear to be organized for the purpose of magnifying their idol.

And if such men as those who composed the railroad convention in this city do not rebuke such a

* Adams S. Hill, now professor of English literature in Harvard University. Then he was a correspondent of the "Tribune" in Washington.

† New York "Tribune," February 20, 1862, editorial page.

practice as that perpetrated in this instance, they cannot be conferred with in future.

You will, of course, see the propriety of my not noticing the matter, and thereby giving it importance beyond the contempt it inspires. I think you are well enough acquainted with me to judge in future the value of any such statement.

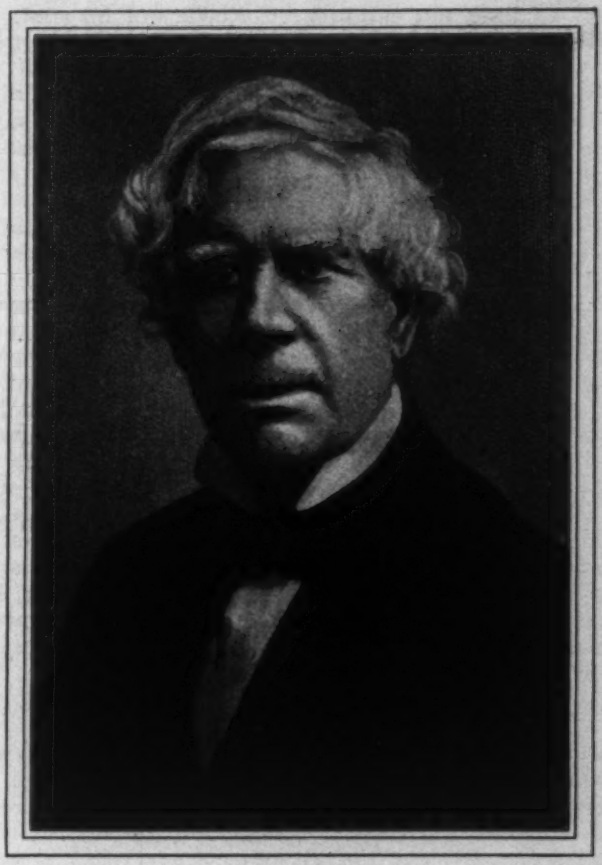
I notice the "Herald" telegraphic reporter announces that I had a second attack of illness on Friday and could not attend the department. I was in the department, or in cabinet, from 9 A.M. until 9 at night, and never enjoyed more perfect health than on that day and at present.

For *your* kind solicitude accept my thanks. I shall not needlessly impair my means of usefulness.

Yours truly,
EDWIN M. STANTON.

C. A. DANA, ESQ.

P.S.—Was it not a funny sight to see a certain military hero in the telegraph office at Washington last Sunday organizing victory, and by sublime military combinations capturing Fort Donelson *six hours after* Grant and Smith had taken it sword in hand and had victorious possession! It would be a picture worthy of "Punch."



THURLOW WEED.

When Mr. Dana entered the War Department Mr. Weed was in Europe, trying to prevail on foreign governments to refrain from recognizing the Confederacy.

FIRST CONNECTION WITH THE WAR DEPARTMENT.

Thus when the newspapers announced my unexpected retirement from the "Tribune," I was not unknown to either the President or the Secretary of War.

To Mr. Stanton's letter asking me to go into the service of the War Department, I replied that I would take anything he wanted me to, and in May he wrote me that I was to be appointed on a commission to audit unsettled claims against the quartermaster's department at Cairo, Illinois. I was directed to be in Cairo on June 17th. My formal appointment, which I did not receive until after I reached Cairo, read:

WAR DEPARTMENT, WASHINGTON CITY, D. C.,
June 16, 1862.

Sir:—By direction of the President, a commission has been appointed, consisting of Messrs. George S. Boutwell, Stephen T. Logan, and yourself, to examine and report upon all unsettled claims against the War Department, at Cairo, Illinois, that may have originated prior to the first day of April, 1862.

Messrs. Boutwell and Logan have been requested to meet with you at Cairo on the eighteenth day of June instant, in order that the commission may be organized on that day and enter immediately upon the discharge of its duties.

You will be allowed a compensation of eight dollars per day and mileage.

Mr. Thomas Means, who has been appointed solicitor for the government, has been directed to meet you at Cairo on the 18th instant, and will act under the direction of the commission in the investigation of such claims as may be presented.

EDWIN M. STANTON,
Secretary of War.

HON. CHARLES A. DANA of New York,

Cairo, Illinois.

On reaching Cairo on the appointed day, I found my associates, Judge Logan of Springfield, Illinois, one of Mr. Lincoln's friends, and Mr. Boutwell of Massachusetts—afterward governor of that State, Secretary of the Treasury, and a senator—both present. We organized on the 18th, as directed. Two days after we met, Judge Logan was compelled by illness to resign from the commission, and Shelby M. Cullom, now United States Senator from Illinois, was appointed in his place.

The main Union armies had by now advanced far to the front, but Cairo was still an important military depot—almost an outpost—in command of General William K. Strong, whom I had known well in New

York as a Republican politician. There was a large number of troops stationed in the town, and from there the armies on the Mississippi, in Missouri, and Kentucky got all their supplies and munitions of war. The quartermaster's department there had been organized hastily, and the demands upon it had increased rapidly. Much of the business had been done by green volunteer officers who did not understand the technical duties of making out military requisitions and returns; the result was that the accounts were in great confusion, and hysterical newspapers were charging the department with fraud and corruption. The matter could not be settled by any ordinary means, and the commission went there as a kind of supreme authority, accepting or rejecting claims, and paying them as we thought fit, after examining the evidence.

Sixteen hundred and ninety-six claims, amounting to $599,219.36, were examined by us. Of those approved and certified for payment the amount was $451,105.80.

Of the claims rejected a considerable portion were for losses suffered in the active operations of the army, either through departure from discipline on the part of soldiers, or from requisitions made by officers who failed to give receipts and certificates to the parties, who were thus unable to support their claims by sufficient evidence. Many claims of this description were also presented by persons whose loyalty to the government was impeached by credible witnesses. In rejecting these the commission set forth the disloyalty of the claimants, in the certificates written on the face of their accounts. Other accounts, whose rightfulness was established, were rejected on proof of disloyalty. The commission regarded complicity in the rebellion as barring all claims against the United States.

A very small percentage of the claims were rejected because of fraud. In almost every case it was possible to suppose that the apparent fraud was accident. My observation throughout the war was the same. I do not believe that so much business could be transacted with a closer adherence to the line of honesty. That there were frauds is a matter of course, because men, and even some women, are wicked, but they were the exception.

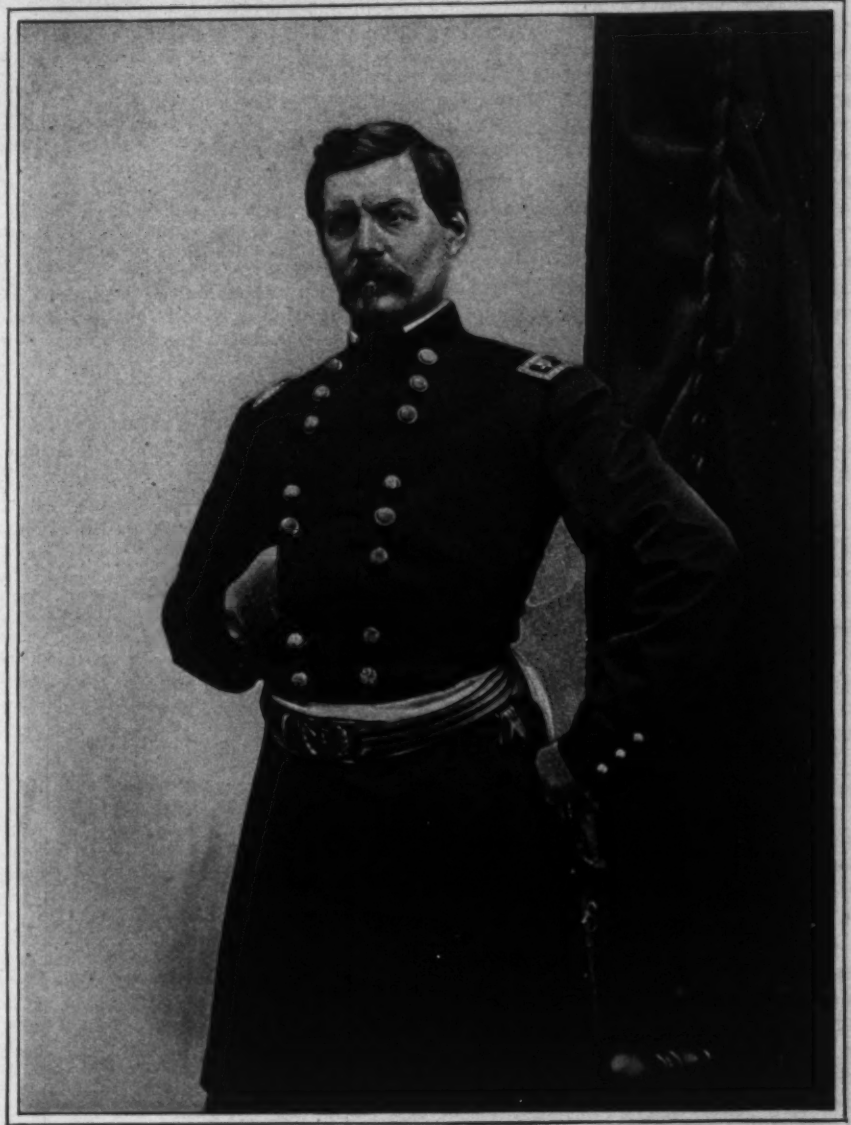
FIRST MEETING WITH GRANT.

All the leisure that I had at Cairo I spent in horseback riding up and down the river banks and in visiting the adjacent military posts. My longest and most interesting trip was on the Fourth of July, when I went down the Mississippi to attend a big celebration at Memphis. I remember it particularly because it was there that I first met General Grant. The officers stationed in the city gave a dinner that day to which I was invited. At the table I was seated between Grant and Major John A. Rawlins of his staff. I remember distinctly the pleasant impression Grant made —that of a man of simple manners, straightforward, cordial, and unpretending. He had already fought the successful battles of Fort Donelson and Shiloh, and when I met him, was a major-general in command of the district of West Tennessee, Department of the Missouri, under Halleck, with headquarters at Memphis. Although one would not have suspected it from his manners, he was really under a cloud at the time because of the operations at Shiloh. Those who did not like him had accused him of having been taken by surprise there, and had declared that he would have been beaten if Buell had not come up. I often talked later with Grant's staff officers about Shiloh, and they always affirmed that he would have been successful if Buell had not come to his relief. I believe Grant himself thought so, although he never, in any one of the many talks I afterwards had with him about the battle, said so directly.

RETURN TO WASHINGTON.

We finished our labors at Cairo on the 31st of July, 1862, and I went at once to Washington with the report, placing it in the hands of Mr. Stanton on August 5th. It was never printed, and the manuscript is still in the files of the War Department.

There was a great deal of curiosity among officers in Washington about the result of our investigation, and all the time that I was in the city I was questioned on the subject. It was natural enough that they should have been interested in our report. The charges of fraud and corruption against officers and contractors had become so reckless and general that the mere sight of a man in conference with a high official led to the suspicion and often the charge that he was conspiring to rob the government. That in this case, where the charges seemed so well based, so small a percentage of corruption had been proved was a source of solid



GENERAL GEORGE B. McCLELLAN, COMMANDER OF THE ARMIES IN 1862.

satisfaction to everyone in the War Department.

As Mr. Stanton had no immediate need of my services, I returned to New York in August, where I was occupied with various private affairs until the middle of November, when I received a telegram from Assistant Secretary of War P. H. Watson, asking me to come immediately to Washington to enter upon another investigation. I went, and was received by Mr. Stanton, who offered me the place of Assistant Secretary of War. I said I would accept. "All right," said he, "consider it settled."

As I went out from the War Department into the street I met Major Charles G. Halpine (Miles O'Reilly) of the Sixty-ninth New York Infantry. I had known Halpine well as a newspaper man in New York, and I told him of my appointment as Mr. Stanton's assistant. He immediately repeated what I had told him to some newspaper people; it was reported in the New York papers the next morning. The secretary was greatly offended, and

withdrew the appointment. When I told Halpine I had, of course, no idea he was going to repeat it; besides I did not think there was any harm in telling.

Immediately after this episode I formed a partnership with Roscoe Conkling and George W. Chadwick to buy cotton. The outcry which the manufacturers had raised over the inability to get cotton for their industries had induced the government to permit trading through the lines of the army, and the business looked profitable. Conkling and I each put $10,000 into the firm, and Chadwick gave his services, which, as he was an expert in cotton, was considered equal to our capital. To facilitate our operations, I went to Washington to ask Mr. Stanton for letters of recommendation to the generals on and near the Mississippi, where we proposed to begin our operations. Mr. Stanton and I had several conversations about the advisability of allowing such traffic, but he did not hesitate about giving me the letters I asked. There were several of them—one to General Hurlbut, then at Memphis, another to General Grant, who was planning his operations against Vicksburg, and another to General Curtis, who commanded in Arkansas. The general purport of them was: "Mr. Dana is my friend, you can rely upon what he says, and if you can be kind to him in any way you will oblige me."

It was in January, 1863, that Chadwick and I went to Memphis, where we staid at the Gayoso Hotel, at that time the swell hotel of the town and the headquarters of several officers.

It was not long after I began to study the trade in cotton before I saw it was a bad business and ought to be stopped. I at once wrote Mr. Stanton the following letter which embodied my observations and gave my opinion as to what should be done:

MEMPHIS, *January* 21, 1863.

Dear Sir:—You will remember our conversations on the subject of excluding cotton speculators from the regions occupied by our armies in the South. I now write to urge the matter upon your attention as a measure of military necessity.

The mania for sudden fortunes made in cotton, raging in a vast population of Jews and Yankees scattered throughout this whole country, and in this town almost exceeding the numbers of the regular residents, has to an alarming extent corrupted and demoralized the army. Every colonel, captain, or quartermaster is in secret partnership with some operator in cotton; every soldier dreams of adding a bale of cotton to his monthly pay. I had no conception of the extent of this evil until I came and saw for myself.

Besides, the resources of the rebels are inordinately increased from this source. Plenty of cotton is brought in from beyond our lines, especially by the agency of Jewish traders, who pay for it ostensibly in treasury notes, but really in gold.

What I would propose is that no private purchaser of cotton shall be allowed in any part of the occupied region.

Let quartermasters buy the article at a fixed price, say twenty or twenty-five cents per pound, and forward it by army transportation to proper centers, say Helena, Memphis, or Cincinnati, to be sold at public auction on government account. Let the sales take place on regular fixed days, so that all parties desirous of buying can be sure when to be present.

But little capital will be required for such an operation. The sales being frequent and for cash will constantly replace the amount employed for the purpose. I should say that two hundred thousand dollars would be sufficient to conduct the movement.

I have no doubt that this two hundred thousand dollars so employed would be more than equal to thirty thousand men added to the national armies.

My pecuniary interest is in the continuance of the present state of things, for while it lasts there are occasional opportunities of profit to be made by a daring operator; but I should be false to my duty did I, on that account, fail to implore you to put an end to an evil so enormous, so insidious, and so full of peril to the country.

My first impulse was to hurry to Washington to represent these things to you in person; but my engagements here with other persons will not allow me to return East so speedily. I beg you, however, to act without delay if possible. An excellent man to put at the head of the business would be General Strong. I make this suggestion without any idea whether the employment would be agreeable to him.

Yours faithfully,

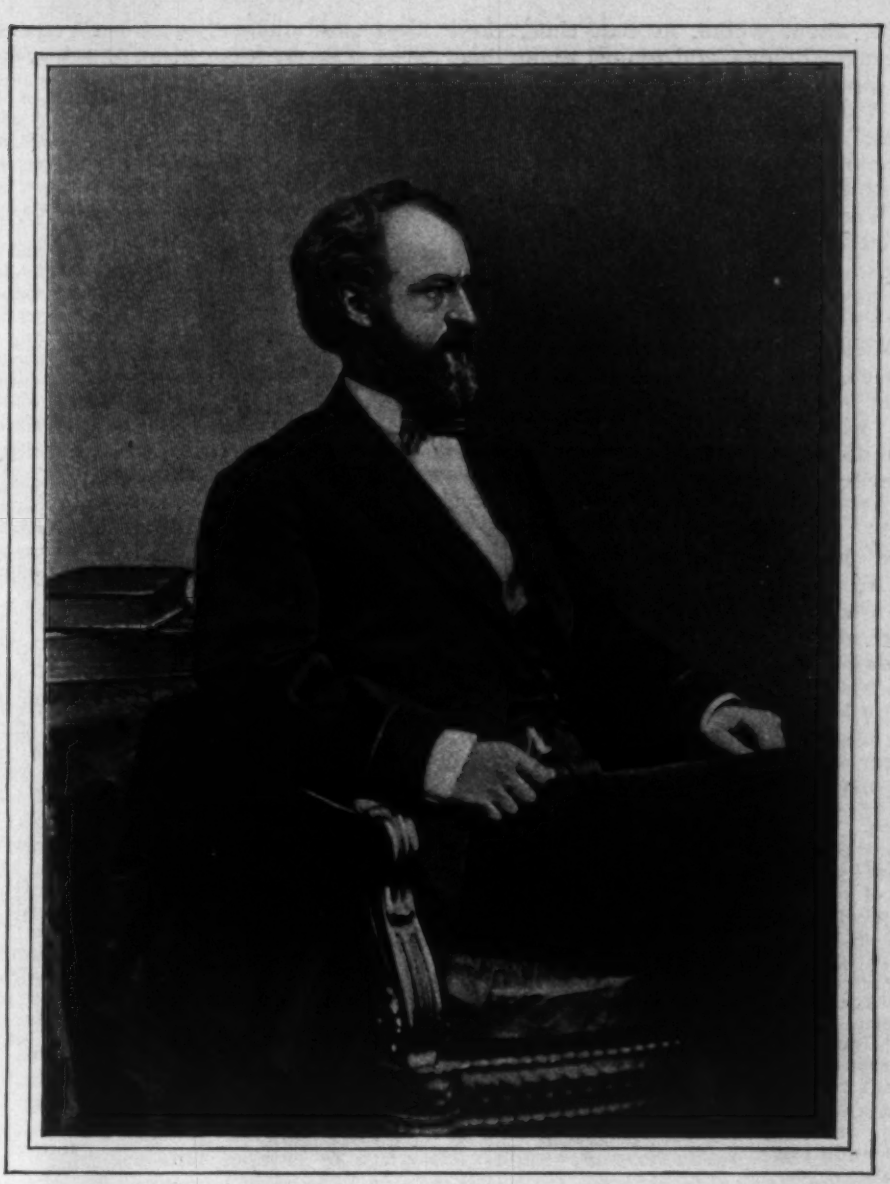
CHARLES A. DANA.

MR. STANTON.

P. S.—Since writing the above I have seen General Grant, who fully agrees with all my statements and suggestions, except that imputing corruption to every officer, which of course I did not intend to be taken literally.

I have also just attended a public sale by the quartermaster here of five hundred bales of cotton, confiscated by General Grant at Oxford and Holly Springs. It belonged to Jacob Thompson and other notorious rebels. This cotton brought to-day over a million and a half of dollars, cash. This sum alone would be five times enough to set on foot the system I recommend, without drawing upon the treasury at all. In fact there can be no question that by adopting this system the quartermaster's department in this valley *would become self-supporting*, while the army would become honest again and the slaveholders would no longer find that the rebellion had quadrupled the price of their great staple, but only doubled it.

As soon as I could get away from Memphis I went to Washington, where I had many conversations with Mr. Lincoln and Mr. Stanton about restricting the trade in cotton. They were deeply interested in my observations, and questioned me closely about what I had seen. My opinion that the trade should be stopped had the more weight because I was able to say, "General Grant and every general officer whom I have seen hopes it will be done."



ROSCOE CONKLING.

Mr. Conkling was a Member of Congress from 1858 to 1862. In the latter year he was defeated of reëlection, but was reëlected in 1864.

The result of our conferences was that on March 31, 1863, Mr. Lincoln issued a proclamation declaring all commercial intercourse with the States in insurrection unlawful, except when carried on according to the regulations prescribed by the Secretary of the Treasury. These regulations Mr. Chase prepared at once. At the same time that Mr. Lincoln issued his proclamation, Mr. Stanton issued an order forbidding officers and all other members of the army to have anything to do with the trade. In spite of all these regulations, however, and the modifications of them which experience brought, there was, throughout the war, more or less difficulty over cotton trading.

SPECIAL COMMISSIONER IN GRANT'S ARMY.

From Washington I went back to New York. I had not been there long before Mr. Stanton sent for me to come to Washington. He wanted some one to go to Grant's army, he said, to report daily to him the military proceedings, and to give such information as would enable Mr. Lincoln and him to settle their minds as to

Grant, about whom, at that time, there were many doubts, and against whom there was some complaint.

"Will you go?" Mr. Stanton asked. "Yes," I said. "Very well," he replied. "The ostensible function I shall give you will be that of a special commissioner of the War Department to investigate the pay department in Western armies, but your real duty will be to report to me every day what you see."

On March 12th, Mr. Stanton wrote me the following letter:

WAR DEPARTMENT, WASHINGTON CITY, *March* 12, 1863.

Dear Sir:—I enclose you a copy of your order of appointment and the order fixing your compensation, with a letter to Generals Sumner,* Grant, and Rosecrans, and a draft for one thousand dollars. Having explained the purposes of your appointment to you personally, no further instructions will be given unless specially required. Please acknowledge the receipt of this and proceed as early as possible to your duties.

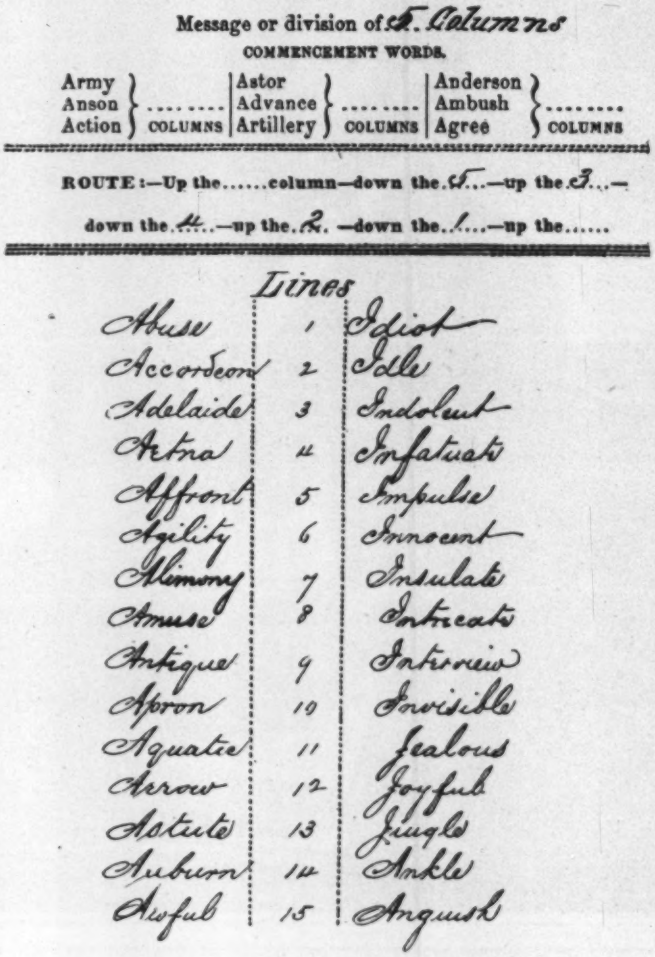
Yours truly,

EDWIN M. STANTON.

C. A. DANA, ESQ., New York.

My commission read:

ORDERED, That C. A. Dana, Esq., be and he is hereby appointed special commissioner of the War Department to investigate and report upon the condition of the pay service in the Western armies. All paymasters and assistant paymasters will furnish to the said commissioner for the Secretary of War information upon any matters concerning which he makes inquiry of them as fully and completely and promptly as if directly called for by the Secretary of War. Railroad agents, quartermasters, and commissioners will give him transportation and subsistence. All officers and persons in the service will aid him in the performance of his duties and will afford him assistance, courtesy, and protection. The said commissioner will make report to this department as occasion may require.



Message or division of 5 Columns

COMMENCEMENT WORDS.

Army, Anson, Action	..... COLUMNS	Astor, Advance, Artillery	..... COLUMNS	Anderson, Ambush, Agree	..... COLUMNS

ROUTE:—Up the.....column—down the.5...—up the.3...—down the.4...—up the.2...—down the.1...—up the.....

	Lines	
Abuse	1	Idiot
Accordeon	2	Idle
Adelaide	3	Indolent
Aetna	4	Infatuate
Affront	5	Impulse
Agility	6	Innocent
Alimony	7	Insulate
Amuse	8	Intricate
Antique	9	Interview
Apron	10	Invisible
Aquatic	11	Jealous
Arrow	12	Joyful
Astute	13	Jungle
Auburn	14	Ankle
Awful	15	Anguish

PAGE FROM KEY TO THE DANA SPECIAL CIPHER.

The key to the Dana Cipher bears Mr. Stanton's own mark, the words "Dana Special" being written in his hand on the first page. A duplicate key was kept at the War Department in Washington. By changing the number of columns and their order of reading, three combinations of cipher were possible from this page alone. As there were eight similar pages the cipher could be varied frequently, though as a matter of fact Mr. Dana's cipher books show that he usually employed the "route" marked on the above page and cited in his text as an illustration.

The letters of introduction and explanation to the generals were identical:

General:—Charles A. Dana, Esq., has been appointed a Special Commissioner of this Department to investigate and report upon the condition of the pay service in the Western armies. You will please aid him in the performance of his duties and communicate to him fully your views and wishes in respect to that branch of the service in your command, and also give to him such information as you may deem beneficial to the service. He is specially commended to your courtesy and protection. Yours truly,

EDWIN M. STANTON.

I at once started for Memphis, going by way of Cairo and Columbus.

THE DANA CIPHER.

I sent my first despatch to the War Department from Columbus, on March 20th.

* General E. V. Sumner, who had just been relieved at his own request from the Army of the Potomac and appointed to the Department of the Missouri. He was on his way thither when he died on March 21st.

It was sent by a secret cipher furnished by the War Department, which I used myself, for throughout the war I was my own cipher clerk. The ordinary method at the various headquarters was for the sender to write out the despatch in full, after which it was translated from plain English into the agreed cipher by a telegraph operator or clerk, retained for that exclusive purpose, who understood it, and by another retranslated back again at the other end of the line. So whatever military secret was transmitted was at the mercy always of at least two outside persons, besides running the gauntlet of other prying eyes. Despatches written in complex cipher codes were often difficult to unravel, unless transmitted by the operator with the greatest precision. A wrong word sometimes destroyed the sense of an entire despatch, and important movements were delayed thereby. This explains the oft-repeated "I do not understand your telegram" found in the official correspondence of the war period.

I have, since the war, become familiar with a great many ciphers, but I never found one which was more satisfactory than that I used in my messages to Mr. Stanton. In preparing my message I first wrote it out in lines of a given number of words, spaced regularly so as to form five, six, seven, eight, nine, and ten columns. My key contained various "routes" to be followed in writing out the messages for transmission. Thus a five-column message had one route, a six-column another, and so on. The route was indicated by a "commencement word." If I had put my message into five columns, I would write the word "army," or any one in a list of nine words, at the beginning. The receiver, on looking for that word in his key, would see that he was to write out what he had received in lines of five words, thus forming five columns, and then he was to read it down the fifth column, up the third, down the fourth, up the second, down the first. At the end of each column an "extra" or "check" word was added as a blind; a list of "blind" words was also printed in the key, with each route, which could be inserted if wished at the end of each line so as still further to deceive curious people who did not have the key. The key contained a large number of cipher words—thus, P. H. Sheridan was "soap" or "Somerset;" President was "Pembroke" or "Penfield;" instead of writing "there has been," I wrote "maroon;" instead of secession, "mint;" instead of Vicksburg, "Cupid." My own cipher was "spunky" or "squad." The months, days, hours, numerals, and alphabet all had ciphers.

The only message sent by this cipher to be translated by an outsider on the route, so far as I know, was that one of 4 P.M., September 20, 1863, in which I reported the Union defeat at Chickamauga. General R. S. Granger, who was then at Nashville, was at the telegraph office waiting for news when my despatch passed through. The operator guessed out the despatch, as he afterward confessed, and it was passed around Nashville. The agent of the Associated Press at Louisville sent out a private printed circular quoting me as an authority for reporting the battle as a total defeat, and in Cincinnati Horace Maynard repeated, the same day of the battle, the entire second sentence of the despatch, "Chickamauga is as fatal a name in our history as Bull Run."

This premature disclosure to the public of what was only the truth, well known at the front, caused a great deal of trouble. I immediately set on foot an investigation to discover who had penetrated our cipher code, and soon arrived at a satisfactory understanding of the matter, of which Mr. Stanton was duly informed. No blame could attach to me, as was manifest upon the inquiry; nevertheless, the sensation resulted in considerable annoyance all along the line from Chattanooga to Washington. I suggested to Mr. Stanton the advisability of concocting a new and more difficult cipher; but it was never changed, so far as I now remember.

DREAMERS.

By Rosalie M. Jonas.

With drawing by Louise L. Heustis.

Drums and trumpets thrown aside,
Eyelids drooping, "arms at rest,"
Fast asleep on mother's breast.

Lo! this dimpled warrior dreams
Of far conquests that shall be
When a "grown-up man" is he.

And she dreams, who holds him close,
"I shall always keep him so,
Safely shielded from life's woe."

Dreamers both! but bide ye, Fate,
On the threshold of their door,
For a little moment more.

ST. IVES

THE ADVENTURES OF A FRENCH PRISONER IN ENGLAND.

By Robert Louis Stevenson,

Author of "Treasure Island," "Kidnapped," etc.

CONCLUSION.

CHAPTER XXVIII (*Continued*).

EVENTS OF MONDAY: THE LAWYER'S PARTY.

IT is a strange thing how young men in their teens go down at the mere wind of the coming of men of twenty-five and upwards! The vapid ones fled without thought of resistance before the major and me; a few dallied awhile in the neighborhood—so to speak, with their fingers in their mouths—but presently these also followed the rout, and we remained face to face before Flora. There was a draught in that corner by the door; she had thrown her pelisse over her bare arms and neck, and the dark fur of the trimming set them off. She shone by contrast; the light played on her smooth skin to admiration, and the color changed in her excited face. For the least fraction of a second she looked from one to the other of her rival swains, and seemed to hesitate. Then she addressed Chevenix:

"You are coming to the Assembly, of course, Major Chevenix?" said she.

"I fear not; I fear I shall be otherwise engaged," he replied. "Even the pleasure of dancing with you, Miss Flora, must give way to duty."

For awhile the talk ran harmlessly on the weather, and then branched off towards the war. It seemed to be by no one's fault; it was in the air, and had to come.

"Good news from the scene of operations," said the major.

"Good news while it lasts," I said. "But will Miss Gilchrist tell us her private thought upon the war? In her admiration for the victors, does not there mingle some pity for the vanquished?"

"Indeed, sir," she said, with animation, "only too much of it! War is a subject that I do not think should be talked of to a girl. I am, I have to be—what do you call it?—a non-combatant? And to remind me of what others have to do and suffer: no, it is not fair!"

"Miss Gilchrist has the tender female heart," said Chevenix.

"Do not be too sure of that!" she cried. "I would love to be allowed to fight, myself!"

"On which side?" I asked.

"Can you ask?" she exclaimed. "I am a Scottish girl!"

"She is a Scottish girl!" repeated the major, looking at me. "And no one grudges you her pity!"

"And I glory in every grain of it she has to spare," said I. "Pity is akin to love."

"Well, and let us put that question to Miss Gilchrist. It is for her to decide, and for us to bow to the decision. Is pity, Miss Flora, or is admiration, nearest love?"

"Oh, come," said I, "let us be more concrete. Lay before the lady a complete case: describe your man, then I'll describe *mine*, and Miss Flora shall decide."

"I think I see your meaning," said he, "and I'll try. You think that pity—and the kindred sentiments—have the greatest power upon the heart. I think more nobly of women. To my view, the man they love will first of all command their respect; he will be steadfast—proud, if you please; dry, possibly—but of all things steadfast. They will look at him in doubt; at last they will see that stern face which he presents to all the rest of the world soften to them alone. First, trust, I say. It is so that a woman loves who is worthy of heroes."

"Your man is very ambitious, sir," said I, "and very much of a hero! Mine is a humbler and, I would fain think, a more human dog. He is one with no particular trust in himself, with no superior steadfastness to be admired for, who sees a lady's face, who hears her voice, and, without

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any phrase about the matter, falls in love. What does he ask for, then, but pity?—pity for his weakness, pity for his love, which is his life. You would make women always the inferiors, gaping up at your imaginary lover; he, like a marble statue, with his nose in the air! But God has been wiser than you; and the most steadfast of your heroes may prove human, after all. We appeal to the queen for judgment," I added, turning and bowing before Flora.

"And how shall the queen judge?" she asked. "I must give you an answer that is no answer at all. 'The wind bloweth where it listeth': she goes where her heart goes." Her face flushed as she said it; mine also, for I read in it a declaration, and my heart swelled for joy. But Chevenix grew pale.

"You make of life a very dreadful kind of a lottery, ma'am," said he. "But I will not despair. Honest and unornamental is still my choice." And I must say he looked extremely handsome and very amusingly like the marble statue with its nose in the air to which I had compared him.

"I cannot imagine how we got upon this subject," said Flora.

"Madam, it was through the war," replied Chevenix.

"All roads lead to Rome," I commented. "What else would you expect Mr. Chevenix and myself to talk of?"

About this time I was conscious of a certain bustle and movement in the room behind me, but did not pay to it that degree of attention which perhaps would have been wise. There came a certain change in Flora's face; she signaled repeatedly with her fan; her eyes appealed to me obsequiously; there could be no doubt that she wanted something—as well as I could make out, that I should go away and leave the field clear for my rival, which I had not the least idea of doing. At last she rose from her chair with impatience. "I think it time you were saying good-night, Mr. Ducie!" she said. I could not in the least see why, and said so. Whereupon she gave me this appalling answer, "My aunt is coming out of the card-room." In less time than it takes to tell, I had made my bow and my escape.

Looking back from the doorway, I was privileged to see, for a moment, the august profile and gold eyeglasses of Miss Gilchrist issuing from the card-room; and the sight lent me wings. I stood not on the order of my going; and a moment after, I was on the pavement of Castle Street, and the lighted windows shone down on me, and were crossed by ironical shadows of those who had remained behind.

CHAPTER XXIX.

EVENTS ON TUESDAY: THE TOILS CLOSING.

THIS day began with a surprise. I found a letter on my breakfast-table addressed to Edward Ducie, Esquire; and at first I was startled beyond measure. "Conscience doth make cowards of us all!" When I had opened it, it proved to be only a note from the lawyer, enclosing a card for the Assembly Ball on Thursday evening. Shortly after, as I was composing my mind with a cigar at one of the windows of the sitting-room, and Rowley, having finished the light share of work that fell to him, sat not far off tootling with great spirit and a marked preference for the upper octave, Ronald was suddenly shown in. I got him a cigar, drew in a chair to the side of the fire, and installed him there—I was going to say, at his ease, but no expression could be farther from the truth. He was plainly on pins and needles, did not know whether to take or to refuse the cigar, and, after he had taken it, did not know whether to light or to return it. I saw he had something to say; I did not think it was his own something; and I was ready to offer a large bet it was really something of Major Chevenix's.

"Well, and so here you are!" I observed, with pointless cordiality, for I was bound I should do nothing to help him out. If he were, indeed, here running errands for my rival, he might have a fair field, but certainly no favor.

"The fact is," he began, "I would rather see you alone."

"Why, certainly," I replied. "Rowley, you can step into the bedroom. My dear fellow," I continued, "this sounds serious. Nothing wrong, I trust."

"Well, I'll be quite honest," said he. I *am* a good deal bothered."

"And I bet I know why!" I exclaimed. "And I bet I can put you to rights, too."

"What do you mean!" he asked.

"You must be hard up," said I, "and all I can say is, you've come to the right place. If you have the least use for a hundred pounds, or any such trifling sum as that, please mention it. It's here, quite at your service."

"I am sure it is most kind of you," said Ronald, "and the truth is, though I can't think how you guessed it, that I really *am* a little behind board. But I haven't come to talk about that."

"No, I daresay!" cried I. "Not worth talking about! But remember, Ronald, you and I are on different sides of the business. Remember that you did me one of those services that make men friends forever. And since I have had the fortune to come into a fair share of money, just oblige me, and consider so much of it as your own."

"No," he said, "I couldn't take it; I couldn't, really. Besides, the fact is, I've come on a very different matter. It's about my sister, St. Ives," and he shook his head menacingly at me.

"You're quite sure?" I persisted. "It's here, at your service—up to five hundred pounds, if you like. Well, all right; only remember where it is, when you do want it."

"Oh, please let me alone!" cried Ronald. "I've come to say something unpleasant; and how on earth can I do it, if you don't give a fellow a chance? It's about my sister, as I said. You can see for yourself that it can't be allowed to go on. It's compromising; it don't lead to anything; and you're not the kind of man (you must feel it yourself) that I can allow my female relatives to have anything to do with. I hate saying this, St. Ives; it looks like hitting a man when he's down, you know; and I told the major I very much disliked it from the first. However, it had to be said; and now it has been, and, between gentlemen, it shouldn't be necessary to refer to it again."

"It's compromising; it doesn't lead to anything; not the kind of man," I repeated thoughtfully. "Yes, I believe I understand, and shall make haste to put myself *en regle*." I stood up, and laid my cigar down. "Mr. Gilchrist," said I, with a bow, "in answer to your very natural observations, I beg to offer myself as a suitor for your sister's hand. I am a man of title, of which we think lightly in France, but of ancient lineage, which is everywhere prized. I can display thirty-two quarterings without a blot. My expectations are certainly above the average: I believe my uncle's income averages about thirty thousand pounds, though I admit I was not careful to inform myself. Put it anywhere between fifteen and fifty thousand; it is certainly not less."

"All this is very easy to say," said Ronald, with a pitying smile. "Unfortunately, these things are in the air."

"Pardon me—in Buckinghamshire," said I, smiling.

"Well, what I mean is, my dear St. Ives, that you *can't prove* them," he continued. "They might just as well not be: do you follow me? You can't bring us any third party to back you up."

"Oh, come!" cried I, springing up and hurrying to the table. "You must excuse me!" I wrote Romaine's address. "There is my reference, Mr. Gilchrist. Until you have written to him, and received his negative answer, I have a right to be treated, and I shall see that you treat me, as a gentleman." He was brought up with a round turn at that.

"I beg your pardon, St. Ives," said he. "Believe me, I had no wish to be offensive. But there's the difficulty of this affair; I can't make any of my points without offence! You must excuse me, it's not my fault. But, at any rate, you must see for yourself this proposal of marriage is—is merely impossible, my dear fellow. It's nonsense! Our countries are at war; you are a prisoner."

"My ancestor of the time of the Ligue," I replied, "married a Huguenot lady out of the Saintonge, riding two hundred miles through an enemy's country to bring off his bride; and it was a happy marriage."

"Well!" he began; and then looked down into the fire, and became silent.

"Well?" I asked.

"Well, there's this business of—Goguelat," said he, still looking at the coals in the grate.

"What!" I exclaimed, starting in my chair. "What's that you say?"

"This business about Goguelat," he repeated.

"Ronald," said I, "this is not your doing. These are not your own words. I know where they came from: a coward put them in your mouth."

"St. Ives!" he cried, "why do you make it so hard for me? and where's the use of insulting other people? The plain English is, that I can't hear of any proposal of marriage from a man under a charge like that. You must see it for yourself, man! It's the most absurd thing I ever heard of! And you go on forcing me to argue with you, too!"

"Because I have had an affair of honor which terminated unhappily, you—a young soldier, or next-door to it—refuse my

offer? Do I understand you aright?" said I.

"My dear fellow!" he wailed, "of course you can twist my words, if you like. You *say* it was an affair of honor. Well, I can't, of course tell you that—I can't—I mean, you must see that that's just the point! Was it? I don't know."

"I have the honor to inform you," said I.

"Well, other people say the reverse, you see!"

"They lie, Ronald, and I will prove it in time."

"The short and long of it is, that any man who is so unfortunate as to have such things said about him is not the man to be my brother-in-law," he cried.

"Do you know who will be my first witness at the court? Arthur Chevenix!" said I.

"I don't care!" he cried, rising from his chair and beginning to pace outrageously about the room. "What do you mean, St. Ives? What is this about? It's like a dream, I declare! You made an offer, and I have refused it. I don't like it, I don't want it; and whatever I did, or didn't, wouldn't matter—my aunt wouldn't hear of it, anyway! Can't you take your answer, man?"

"You must remember, Ronald, that we are playing with edged tools," said I. "An offer of marriage is a delicate subject to handle. You have refused, and you have justified your refusal by several statements. First, that I was an impostor; second, that our countries were at war; and third—no, I will speak," said I; "you can answer when I have done,—and third, that I had dishonorably killed—or was said to have done so—the man Goguelat. Now, my dear fellow, these are very awkward grounds to be taking. From any one else's lips I need scarce tell you how I should resent them; but my hands are tied. I have so much gratitude for you, without talking of the love I bear your sister, that you insult me, when you do so, under the cover of a complete impunity. I must feel the pain—and I do feel it acutely—I can do nothing to protect myself."

He had been anxious enough to interrupt me in the beginning; but now, and after I had ceased, he stood a long while silent.

"St. Ives," he said at last, "I think I had better go away. This has been very irritating. I never at all meant to say anything of the kind, and I apologize to you. I have all the esteem for you that one gentleman should have for another. I only meant to tell you—to show you what had influenced my mind; and that, in short, the thing was impossible. One thing you may be quite sure of: *I* shall do nothing against you. Will you shake hands before I go away?" he blurted out.

"Yes," said I, "I agree with you—the interview has been irritating. Let bygones be bygones. Good-by, Ronald."

"Good-by, St. Ives!" he returned. "I'm heartily sorry."

And with that he was gone.

The windows of my own sitting-room looked toward the north; but the entrance passage drew its light from the direction of the square. Hence I was able to observe Ronald's departure, his very disheartened gait, and the fact that he was joined, about half-way, by no less a man than Major Chevenix. At this, I could scarce keep from smiling; so unpalatable an interview must be before the pair of them, and I could hear their voices, clashing like crossed swords, in that eternal antiphony of "I told you," and "I told you not." Without doubt, they had gained very little by their visit; but then I had gained less than nothing, and had been bitterly dispirited into the bargain. Ronald had stuck to his guns and refused me to the last. It was no news; but, on the other hand, it could not be contorted into good news. I was now certain that during my temporary absence in France, all irons would be put into the fire, and the world turned upside down, to make Flora disown the obtrusive Frenchman and accept Chevenix. Without doubt she would resist these instances; but the thought of them did not please me, and I felt she should be warned and prepared for the battle.

It was no use to try and see her now, but I promised myself early that evening to return to Swanston. In the meantime I had to make all my preparations, and look the coming journey in the face. Here in Edinburgh I was within four miles of the sea, yet the business of approaching random fishermen with my hat in one hand and a knife in the other, appeared so desperate, that I saw nothing for it but to retrace my steps over the northern counties, and knock a second time at the doors of Birchell Fenn. To do this, money would be necessary; and after leaving my paper in the hands of Flora I had still a balance of about fifteen hundred pounds. Or rather I may say I had them and I had them not;

for after my luncheon with Mr. Robbie I had placed the amount, all but thirty pounds of change, in a bank in George Street, on a deposit receipt in the name of Mr. Rowley. This I had designed to be my gift to him, in case I must suddenly depart. But now, thinking better of the arrangement, I had despatched my little man, cockade and all, to lift the fifteen hundred.

He was not long gone, and returned with a flushed face and the deposit receipt still in his hand.

"No go," Mr. Anne," says he.

"How's that?" I inquired.

"Well, sir, I found the place all right, and no mistake," said he. "But I tell you wot gave me a blue fright! There was a customer standing by the door, and I reckonized him! Who do you think it was, Mr. Anne? W'y, that same Red-Breast—him I had breakfast with near Aylesbury."

"You are sure you are not mistaken?" I asked.

"Certain sure," he replied. "Not Mr. Lavender, I don't mean, sir; I mean the other party. 'Wot's he doin' here?' says I. 'It don't look right.'"

"Not by any means," I agreed.

I walked to and fro in the apartment reflecting. This particular Bow Street runner might be here by accident; but it was to imagine a singular play of coincidence that he, who had met Rowley and spoken with him in the "Green Dragon," hard by Aylesbury, should be now in Scotland, where he could have no legitimate business, and by the doors of the bank where Rowley kept his account.

"Rowley," said I, "he didn't see you, did he?"

"Never a fear," quoth Rowley. "W'y, Mr. Anne, sir, if he 'ad you wouldn't have seen *me* any more! I ain't a hass, sir!"

"Well, my boy, you can put that receipt in your pocket. You'll have no more use for it till you're quite clear of me. Don't lose it, though; it's your share of the Christmas-box: fifteen hundred pounds all for yourself."

"Begging your pardon, Mr. Anne, sir, but wot for?" said Rowley.

"To set up a public-house upon," said I.

"If you'll excuse me, sir, I ain't got any call to set up a public-house, sir," he replied, stoutly. "And I tell you wot, sir, it seems to me I'm reether young for the billet. I'm your body-servant, Mr. Anne, or else I'm nothink."

"Well, Rowley," I said, "I'll tell you what it's for. It's for the good service you have done me, of which I don't care—and don't dare—to speak. It's for your loyalty and cheerfulness, my dear boy. I had meant it for you; but to tell you the truth, it's past mending now—it has to be yours. Since that man is waiting by the bank, the money can't be touched until I'm gone."

"Until you're gone, sir?" reëchoed Rowley. "You don't go anywheres without me, I can tell you that, Mr. Anne, sir!"

"Yes, my boy," said I, "we are going to part very soon now; probably to-morrow. And it's for my sake, Rowley! Depend upon it, if there was any reason at all for that Bow Street man being at the bank, he was not there to look out for *you*. How they could have found out about the account so early is more than I can fathom; some strange coincidence must have played me false! But there the fact is; and, Rowley, I'll not only have to say farewell to you presently, I'll have to ask you to stay indoors until I can say it. Remember, my boy, it's only so that you can serve me now."

"W'y, sir, you say the word, and of course I'll do it!" he cried. "'Nothink by 'alves,' is my motto! I'm your man, through thick and thin, live or die, I am!"

In the meantime there was nothing to be done till towards sunset. My only chance now was to come again as quickly as possible to speech of Flora, who was my only practicable banker; and not before evening was it worth while to think of that. I might compose myself as well as I was able over the "Caledonian Mercury," with its ill news of the campaign of France and belated documents about the retreat from Russia; and, as I sat there by the fire, I was sometimes all awake with anger and mortification at what I was reading, and sometimes again I would be three parts asleep as I dozed over the barren items of home intelligence. "Lately arrived"—this is what I suddenly stumbled on—"at Dumbreck's Hotel, the Viscount of Saint-Yves."

"Rowley," said I.

"If you please, Mr. Anne, sir," answered the obsequious, lowering his pipe.

"Come and look at this, my boy," said I, holding out the paper.

"My crikey!" said he. "That's 'im, sure enough!"

"Sure enough, Rowley," said I. "He's on the trail. He has fairly caught up with

us. He and his Bow Street man have come together, I would swear. And now here is the whole field, quarry, hounds, and hunters, all together in this city of Edinburgh."

"And wot are you goin' to do now, sir? Tell you wot, let me take it in 'and, please! Gimme a minute, and I'll disguise myself, and go out to this Dum—to this hotel, leastways, sir—and see wot he's up to. You put your trust in me, Mr. Anne: I'm fly, don't you make no mistake about it. I'm all a-growing and a-blowing, I am."

"Not one foot of you," said I. "You are a prisoner, Rowley, and make up your mind to that. So am I, or next door to it. I showed it you for a caution; if you go on the streets, it spells death to me, Rowley."

"If you please, sir," says Rowley.

"Come to think of it," I continued, "you must take a cold, or something. No good of awakening Mrs. McRankine's suspicions."

"A cold?" he cried, recovering immediately from his depression. "I can do it, Mr. Anne."

And he proceeded to sneeze and cough and blow his nose, till I could not restrain myself from smiling.

"Oh, I tell you, I know a lot of them dodges," he observed proudly.

"Well, they come in very handy," said I.

"I'd better go at once and show it to the old gal, 'adn't I?" he asked.

I told him, by all means; and he was gone upon the instant, gleeful as though to a game of football.

I took up the paper, and read carelessly on, my thoughts engaged with my immediate danger, till I struck on the next paragraph:

"In connection with the recent horrid murder in the Castle, we are desired to make public the following intelligence. The soldier, Champdivers, is supposed to be in the neighborhood of this city. He is about the middle height or rather under, of a pleasing appearance and highly genteel address. When last heard of he wore a fashionable suit of pearl gray, and boots with fawn-colored tops. He is accompanied by a servant about sixteen years of age, speaks English without any accent, and passed under the *alias* of Ramornie. A reward is offered for his apprehension."

In a moment I was in the next room, stripping from me the pearl-colored suit!

I confess I was now a good deal agitated. It is difficult to watch the toils closing slowly and surely about you and to retain your composure; and I was glad that Rowley was not present to spy on my confusion. I was flushed, my breath came thick; I cannot remember a time when I was more put out.

And yet I must wait and do nothing, and partake of my meals, and entertain the ever-garrulous Rowley, as though I were entirely my own man. And if I did not require to entertain Mrs. McRankine also, that was but another drop of bitterness in my cup! For what ailed my landlady, that she should hold herself so severely aloof, that she should refuse conversation, that her eyes should be reddened, that I should so continually hear the voice of her private supplications sounding through the house? I was much deceived, or she had read the insidious paragraph and recognized the comminated pearl-gray suit. I remembered now a certain air with which she had laid the paper on my table, and a certain sniff, between sympathy and defiance, with which she had announced it: "There's your 'Mercury' for ye!"

In this direction, at least, I saw no pressing danger; her tragic countenance betokened agitation; it was plain she was wrestling with her conscience, and the battle still hung dubious. The question of what to do troubled me extremely. I could not venture to touch such an intricate and mysterious piece of machinery as my landlady's spiritual nature; it might go off at a word, and in any direction, like a badly-made firework. And while I praised myself extremely for my wisdom in the past, that I had made so much a friend of her, I was all abroad as to my conduct in the present. There seemed an equal danger in pressing and in neglecting the accustomed marks of familiarity. The one extreme looked like impudence, and might annoy; the other was a practical confession of guilt. Altogether it was a good hour for me when the dusk began to fall in earnest on the streets of Edinburgh and the voice of an early watchman bade me set forth.

I reached the neighborhood of the cottage before seven; and as I breasted the steep ascent which leads to the garden wall, I was struck with surprise to hear a dog. Dogs I had heard before, but only from the hamlet on the hillside above. Now, this dog was in the garden itself, where it roared aloud in paroxysms of fury, and I could hear it leaping and straining on the chain. I waited some while, until the brute's fit of passion had

roared itself out. Then, with the utmost precaution, I drew near again, and finally approached the garden wall. So soon as I had clapped my head above the level, however, the barking broke forth again with redoubled energy. Almost at the same time, the door of the cottage opened, and Ronald and the major appeared upon the threshold with a lantern. As they so stood, they were almost immediately below me, strongly illuminated, and within easy earshot. The major pacified the dog, who took instead to low, uneasy growling intermingled with occasional yelps.

"Good thing I brought Towzer!" said Chevenix.

"Damn him, I wonder where he is!" said Ronald; and he moved the lantern up and down, and turned the night into a shifting puzzle-work of gleam and shadow.

"I think I'll make a sally."

"I don't think you will," replied Chevenix. "When I agreed to come out here and do sentry-go, it was on one condition, Master Ronald: don't you forget that! Military discipline, my boy! Our beat is this path close about the house. Down, Towzer! good boy, good boy—gently, then!" he went on, caressing his confounded monster.

"To think! The beggar may be hearing us this minute!" cried Ronald.

"Nothing more probable," said the major. "You there, St. Ives?" he added, in a distinct but guarded voice. "I only want to tell you, you had better go home. Mr. Gilchrist and I take watch and watch."

The game was up. "*Beaucoup de plaisir!*" I replied, in the same tones. "*Il fait un peu froid pour veiller; gardez-vous des engelures!*"

I suppose it was done in a moment of ungovernable rage; but in spite of the excellent advice he had given to Ronald the moment before, Chevenix slipped the chain, and the dog sprang, straight as an arrow, up the bank. I stepped back, picked up a stone of about twelve pounds' weight, and stood ready. With a bound the beast landed on the cope-stone of the wall; and, almost in the same instant, my missile caught him fair in the face. He gave a stifled cry, went tumbling back where he had come from, and I could hear the twelve-pounder accompany him in his fall. Chevenix, at the same moment, broke out in a roaring voice: "The hell-hound! If he's killed my dog!" and I judged, upon all grounds, it was as well to be off.

CHAPTER XXX.

EVENTS OF WEDNESDAY: THE UNIVERSITY OF CRAMOND.

I AWOKE to much diffidence, even to a feeling that might be called the beginnings of panic, and lay for hours in my bed considering the situation. Seek where I pleased, there was nothing to encourage me, and plenty to appal. They kept a close watch about the cottage; they had a beast of a watch-dog—at least, unless I had settled it; and if I had, I knew its bereaved master would only watch the more indefatigably for the loss. In the pardonable ostentation of love I had given all the money I could spare to Flora; I had thought it glorious that the hunted exile should come down, like Jupiter, in a shower of gold, and pour thousands in the lap of the beloved. Then I had in an hour of arrant folly buried what remained to me in a bank in George Street. And now I must get back the one or the other; and which? and how?

As I tossed in my bed, I could see three possible courses, all extremely perilous. First, Rowley might have been mistaken; the bank might not be watched; it might still be possible for him to draw the money on the deposit receipt. Second, I might apply again to Robbie. Or, third, I might dare everything, go to the Assembly Ball, and speak with Flora under the eyes of all Edinburgh. This last alternative, involving as it did the most horrid risks, and the delay of forty-eight hours, I did but glance at with an averted head, and turned again to the consideration of the others. It was the likeliest thing in the world that Robbie had been warned to have no more to do with me. The whole policy of the Gilchrists was in the hands of Chevenix; and I thought this was a precaution so elementary that he was certain to have taken it. If he had not, of course I was all right: Robbie would manage to communicate with Flora; and by four o'clock I might be on the south road and, I was going to say, a free man. Lastly, I must assure myself with my own eyes whether the bank in George Street were beleagured.

I called to Rowley and questioned him tightly as to the appearance of the Bow Street officer.

"What sort of a looking man is he, Rowley?" I asked, as I began to dress.

"Wot sort of a looking man he is?"

repeated Rowley. "Well, I don't very well know wot you would say, Mr. Anne. He ain't a beauty, any'ow."

"Is he tall?"

"Tall? Well, no, I shouldn't say *tall*, Mr. Anne."

"Well, then, is he short?"

"Short? No, I don't think I would say he was what you would call *short*. No, not piticular short, sir."

"Then, I suppose he must be about the middle height?"

"Well, you might say it, sir; but not remarkable so."

I smothered an oath.

"Is he clean-shaved?" I tried him again.

"Clean-shaved?" he repeated, with the same air of anxious candor.

"Good heaven, man, don't repeat my words like a parrot!" I cried. "Tell me what the man was like: it is of the first importance that I should be able to recognize him."

"I'm trying to, Mr. Anne. But *clean shaved?* I don't seem to rightly get hold of that p'int. Sometimes it might appear to me like as if he was; and sometimes like as if he wasn't. No, it wouldn't surprise me now if you was to tell me he 'ad a bit o' whisker."

"Was the man red-faced?" I roared, dwelling on each syllable.

"I don't think you need go for to get cross about it, Mr. Anne!" said he. "I'm tellin' you every blessed thing I see! Red-faced? Well, no, not as you would remark upon."

A dreadful calm fell upon me.

"Was he anywise pale?" I asked.

"Well, it don't seem to me as though he were. But I tell you truly, I didn't take much heed to that."

"Did he look like a drinking man?"

"Well, no. If you please, sir, he looked more like an eating one."

"Oh, he was stout, was he?"

"No, sir. I couldn't go so far as that. No, he wasn't not to say *stout*. If anything, lean rather."

I need not go on with the infuriating interview. It ended as it began, except that Rowley was in tears and that I had acquired one fact. The man was drawn for me as being of any height you like to mention, and of any degree of corpulence or leanness; clean shaved or not, as the case might be; the color of his hair Rowley "could not take it upon himself to put a name on;" that of his eyes he thought to have been blue—nay, it was the one point on which he attained to a kind of tearful certainty. "I'll take my davy on it," he asseverated. They proved to have been as black as sloes, very little, and very near together. So much for the evidence of the artless! And the fact, or rather the facts, acquired? Well, they had to do not with the person but with his clothing. The man wore knee-breeches and white stockings; his coat was "some kind of a lightish color—or betwixt that and dark;" and he wore a "moleskin weskit." As if this were not enough, he presently hailed me from my breakfast in a prodigious flutter, and showed me an honest and rather venerable citizen passing in the square.

"That's *him*, sir," he cried, "the very moral of him! Well, this one is better dressed, and p'r'aps a trifle taller; and in the face he don't favor him no ways at all, sir. No, not when I come to look again, 'e don't seem to favor him noways."

"Jackass!" said I, and I think the greatest stickler for manners will admit the epithet to have been justified.

Meanwhile the appearance of my landlady added a great load of anxiety to what I had already suffered. It was plain that she had not slept; equally plain that she had wept copiously. She sighed, she groaned, she drew in her breath, she shook her head, as she waited on table. In short, she seemed in so precarious a state, like a petard three times charged with hysteria, that I did not dare to address her; and stole out of the house on tiptoe, and actually ran downstairs, in the fear that she might call me back. It was plain that this degree of tension could not last long. It was my first care to go to George Street, which I reached (by good luck) as a boy was taking down the bank shutters. A man was conversing with him; he had white stockings and a moleskin waistcoat, and was as ill-looking a rogue as you would want to see in a day's journey. This seemed to agree fairly well with Rowley's *signalement*: he had declared emphatically (if you remember), and had stuck to it besides, that the companion of the great Lavender was no beauty.

Thence I made my way to Mr. Robbie's, where I rang the bell. A servant answered the summons, and told me the lawyer was engaged, as I had half expected.

"Wha shall I say was callin'?" she pursued; and when I told her "Mr. Ducie," "I think this'll be for you, then?" she added, and handed me a letter from the hall table. It ran:

"DEAR MR. DUCIE,

"My single advice to you is to leave *quam primum* for the South.

"Yours,

T. ROBBIE."

That was short and sweet. It emphatically extinguished hope in one direction. No more was to be gotten of Robbie; and I wondered, from my heart, how much had been told him. Not too much, I hoped, for I liked the lawyer who had thus deserted me, and I placed a certain reliance in the discretion of Chevenix. He would not be merciful; on the other hand, I did not think he would be cruel without cause.

It was my next affair to go back along George Street, and assure myself whether the man in the moleskin vest was still on guard. There was no sign of him on the pavement. Spying the door of a common stair nearly opposite the bank, I took it in my head that this would be a good point of observation, crossed the street, entered with a businesslike air, and fell immediately against the man in the moleskin vest. I stopped and apologized to him; he replied in an unmistakable English accent, thus putting the matter beyond doubt. After this encounter I must, of course, ascend to the top story, ring the bell of a suite of apartments, inquire for Mr. Vavasour, learn (with no great surprise) that he did not live there, come down again, and, again politely saluting the man from Bow Street, make my escape at last into the street.

I was now driven back upon the Assembly Ball. Robbie had failed me. The bank was watched; it would never do to risk Rowley in that neighborhood. All I could do was to wait until the morrow evening, and present myself at the Assembly, let it end as it might. But I must say I came to this decision with a good deal of genuine fright; and here I came for the first time to one of those places where my courage stuck. I do not mean that my courage boggled and made a bit of a bother over it, as it did over the escape from the Castle; I mean, stuck, like a stop watch or a dead man. Certainly I would go to the ball; certainly I must see this mo nin g about my clothes. That was all decided. But the most of the shops were on the other side of the valley, in the Old Town; and it was now my strange discovery that I was physically unable to cross the North Bridge! It was as though a precipice had stood between us, or the deep sea had intervened. Nearer to the Castle my legs refused to bear me.

I told myself this was mere superstition; I made wagers with myself—and gained them; I went down on the esplanade of Princes Street, walked and stood there, alone and conspicuous, looking across the garden at the old gray bastions of the fortress, where all these troubles had begun. I cocked my hat, set my hand on my hip, and swaggered on the pavement, confronting detection. And I found I could do all this with a sense of exhilaration that was not unpleasing and with a certain *cranerie* of manner that raised me in my own esteem. And yet there was one thing I could not bring my mind to face up to, or my limbs to execute; and that was to cross the valley into the Old Town. It seemed to me I must be arrested immediately if I had done so; I must go straight into the twilight of a prison cell, and pass straight thence to the gross and final embraces of the nightcap and the halter. And yet it was from no reasoned fear of the consequences that I could not go. I was unable. My horse baulked, and there was an end!

My nerve was gone: here was a discovery for a man in such imminent peril, set down to so desperate a game, which I could only hope to win by continual luck and unflagging effrontery! The strain had been too long continued, and my nerve was gone. I fell into what they call panic fear, as I have seen soldiers do on the alarm of a night attack, and turned out of Princes Street at random as though the devil were at my heels. In St. Andrew's Square, I remember vaguely hearing some one call out. I paid no heed, but pressed on blindly. A moment after, a hand fell heavily on my shoulder, and I thought I had fainted. Certainly the world went black about me for some seconds; and when that spasm passed I found myself standing face to face with the "cheerful extravagant," in what sort of disarray I really dare not imagine, dead white at least, shaking like an aspen, and mowing at the man with speechless lips. And this was the soldier of Napoleon, and the gentleman who intended going next night to an Assembly Ball! I am the more particular in telling of my breakdown, because it was my only experience of the sort; and it is a good tale for officers I will allow no man to call me coward; I have made my proofs; few men more. And yet I (come of the best blood in France and inured to danger from a child) did, for some ten or twenty minutes, make this hideous exhibition of myself on

the streets of the New Town of Edinburgh.

With my first available breath I begged his pardon. I was of an extremely nervous disposition, recently increased by late hours; I could not bear the slightest start.

He seemed much concerned. "You must be in a devil of a state!" said he; "though of course it was my fault—damnably silly, vulgar sort of thing to do! A thousand apologies! But you really must be run down; you should consult a medico. My dear sir, a hair of the dog that bit you is clearly indicated. A touch of Blue Ruin, now? Or, come: it's early, but is man the slave of hours? what do you say to a chop and a bottle in Dumbreck's Hotel?"

I refused all false comfort; but when he went on to remind me that this was the day when the University of Cramond met; and to propose a five-mile walk into the country and a dinner in the company of young asses like himself, I began to think otherwise. I had to wait until tomorrow evening, at any rate; this might serve as well as anything else to bridge the dreary hours. The country was the very place for me; and walking is an excellent sedative for the nerves. Remembering poor Rowley, feigning a cold in our lodgings and immediately under the guns of the formidable and now doubtful Bethiah, I asked if I might bring my servant. "Poor devil! it is dull for him," I explained.

"The merciful man is merciful to his ass," observed my sententious friend. "Bring him by all means!

> 'The harp, his sole remaining joy,
> Was carried by an orphan boy;'

and I have no doubt the orphan boy can get some cold victuals in the kitchen, while the Senatus dines."

Accordingly, being now quite recovered from my unmanly condition, except that nothing could yet induce me to cross the North Bridge, I arranged for my ball dress at a shop in Leith Street, where I was not served ill, cut out Rowley from his seclusion, and was ready along with him at the trysting-place, the corner of Duke Street and York Place, by a little after two. The University was represented in force: eleven persons, including ourselves, Byfield the aëronaut, and the tall lad, Forbes, whom I had met on the Sunday morning, bedewed with tallow, at the "Hunter's Tryst." I was introduced; and we set off by may of Newhaven and the sea beach; at first through pleasant country roads, and afterwards along a succession of bays of a fairylike prettiness, to our destination —Cramond on the Almond—a little hamlet on a little river, embowered in woods, and looking forth over a great flat of quicksand to where a little islet stood planted in the sea. It was miniature scenery, but charming of its kind. The air of this good February afternoon was bracing, but not cold. All the way my companions were skylarking, jesting, and making puns, and I felt as if a load had been taken off my lungs and spirits, and skylarked with the best of them.

Byfield I observed, because I had heard of him before and seen his advertisements, not at all because I was disposed to feel interest in the man. He was dark and bilious and very silent; frigid in his manners, but burning internally with a great fire of excitement; and he was so good as to bestow a good deal of his company and conversation (such as it was) upon myself, who was not in the least grateful. If I had known how I was to be connected with him in the immediate future, I might have taken more pains.

In the hamlet of Cramond there is a hostelry of no very promising appearance, and here a room had been prepared for us, and we sat down to table.

"Here you will find no guttling or gormandising, no turtle or nightingales' tongues," said the extravagant, whose name, by the way, was Dalmahoy. "The device, sir, of the University of Cramond is Plain Living and High Drinking."

Grace was said by the Professor of Divinity, in a macaronic Latin, which I could by no means follow, only I could hear it rhymed, and I guessed it to be more witty than reverent. After which the *Senatus Academicus* sat down to rough plenty in the shape of rizzar'd haddocks and mustard, a sheep's head, a haggis, and other delicacies of Scotland. The dinner was washed down with brown stout in bottle, and as soon as the cloth was removed, glasses, boiling water, sugar, and whisky were set out for the manufacture of toddy. I played a good knife and fork, did not shun the bowl, and took part, so far as I was able, in the continual fire of pleasantry with which the meal was seasoned. Greatly daring, I ventured, before all these Scotsmen, to tell Sim's tale of Tweedie's dog; and I was held to have done such extraordinary justice to the dialect, "for a Southron," that I was

immediately voted into the Chair of Scots, and became, from that moment, a full member of the University of Cramond. A little after, I found myself entertaining them with a song; and a little after—perhaps a little in consequence—it occurred to me that I had had enough, and would be very well inspired to take French leave. It was not difficult to manage, for it was nobody's business to observe my movements, and conviviality had banished suspicion.

I got easily forth of the chamber, which reverberated with the voices of these merry and learned gentlemen, and breathed a long breath. I had passed an agreeable afternoon and evening, and I had apparently escaped scot free. Alas! when I looked into the kitchen, there was my monkey, drunk as a lord, toppling on the edge of the dresser, and performing on the flageolet to an audience of the house lasses and some neighboring ploughmen.

I routed him promptly from his perch, stuck his hat on, put his instrument in his pocket, and set off with him for Edinburgh. His limbs were of paper, his mind quite in abeyance; I must uphold and guide him, prevent his frantic dives, and set him continually on his legs again. At first he sang wildly, with occasional outbursts of causeless laughter. Gradually an inarticulate melancholy succeeded; he wept gently at times; would stop in the middle of the road, say firmly, "No, no, no," and then fall on his back; or else address me solemnly as "M'lord," and fall on his face by way of variety. I am afraid I was not always so gentle with the little pig as I might have been, but really the position was unbearable. We made no headway at all, and I suppose we were scarce gotten a mile away from Cramond, when the whole *Senatus Academicus* was heard hailing and doubling the pace to overtake us.

Some of them were fairly presentable; and they were all Christian martyrs compared to Rowley; but they were in a frolicsome and rollicking humor that promised danger as we approached the town. They sang songs, they ran races, they fenced with their walking-sticks and umbrellas; and, in spite of this violent exercise, the fun grew only the more extravagant with the miles they traversed. Their drunkenness was deep-seated and permanent, like fire in a peat; or rather—to be quite just to them—it was not so much to be called drunkenness at all, as the effect of youth and high spirits—a fine night, and the night young, a good road under foot, and the world before you!

I had left them once somewhat unceremoniously; I could not attempt it a second time; and, burthened as I was with Mr. Rowley, I was really glad of assistance. But I saw the lamps of Edinburgh draw near on their hill-top with a good deal of uneasiness, which increased, after we had entered the lighted streets, to positive alarm. All the passers-by were addressed, some of them by name. A worthy man was stopped by Forbes. "Sir," said he, "in the name of the Senatus of the University of Cramond, I confer upon you the degree of LL.D.," and with the words he bonneted him. Conceive the predicament of St. Ives, committed to the society of these outrageous youths, in a town where the police and his cousin were both looking for him! So far, we had pursued our way unmolested, although raising a clamor fit to wake the dead; but at last, in Abercromby Place, I believe—at least it was a crescent of highly respectable houses fronting on a garden—Byfield and I, having fallen somewhat in the rear with Rowley, came to a simultaneous halt. Our ruffians were beginning to wrench off bells and doorplates!

"Oh, I say!" says Byfield, "this is too much of a good thing! Confound it, I'm a respectable man—a public character, by George! I can't afford to get taken up by the police."

"My own case exactly," said I.

"Here, let's bilk them," said he.

And we turned back and took our way down hill again.

It was none too soon: voices and alarm-bells sounded; watchmen here and there began to spring their rattles; it was plain the University of Cramond would soon be at blows with the police of Edinburgh! Byfield and I, running the semi-inanimate Rowley before us, made good despatch, and did not stop till we were several streets away, and the hubbub was already softened by distance.

"Well, sir," said he, "we are well out of that! Did ever any one see such a pack of young barbarians?"

"We are properly punished, Mr. Byfield; we had no business there," I replied.

"No, indeed, sir, you may well say that! Outrageous! And my ascension announced for Saturday, you know!" cried the aëronaut. "A pretty scandal! Byfield the aëronaut at the police-court! Tut-tut! Will you be able to get your

rascal home, sir? Allow me to offer you my card. I am staying at Walker and Poole's Hotel, sir, where I should be pleased to see you."

"The pleasure would be mutual, sir," said I; but I must say my heart was not in my words, and as I watched Mr. Byfield departing, I desired nothing less than to pursue the acquaintance.

One more ordeal remained for me to pass. I carried my senseless load upstairs to our lodging, and was admitted by the landlady in a tall white night-cap and with an expression singularly grim. She lighted us into the sitting-room; where, when I had seated Rowley in a chair, she dropped me a cast-iron courtesy. I smelt gunpowder on the woman. Her voice tottered with emotion.

"I give ye nottice, Mr. Ducie," said she. "Dacent folks' houses . . ."

And at that, apparently, temper cut off her utterance, and she took herself off without more words.

I looked about me at the room, the goggling Rowley, the extinguished fire; my mind reviewed the laughable incidents of the day and night; and I laughed out loud to myself—lonely and cheerless laughter!

At this point the story breaks off, having been laid aside by the author some weeks before his death. The argument of the few chapters remaining to be written was known to his stepdaughter and amanuensis, Mrs. Strong, who has been good enough to supply materials for the following summary:

Anne goes to the Assembly Ball, and there meets Chevenix, Ronald, Flora, and Flora's aunt. Anne is very daring and impudent, Flora very anxious and agitated. The Bow Street runner is on the stairs, and presently the Vicomte de St. Yves is announced. Anne contrives to elude them and to make an appointment with Flora that she should meet him with his money the next day at a solitary place near Swanston. They keep the appointment, and have a long interview, Flora giving him his money packet. They are disturbed by a gathering crowd in the neighborhood, and learn accidentally that a balloon ascent is about to take place close at hand. Perceiving Ronald and Chevenix, Anne leaves Flora and forces his way into the thickest of the crowd, hoping thus to evade pursuit. But the Bow Street runner and the rest of his pursuers follow him up to the balloon itself. The ropes are about to be cut when Anne, after a moment's whispered conversation with the aëronaut, leaps into the car as the balloon rises. The course of the balloon takes it over the British channel, where it descends, and the voyagers are picked up by an American privateer and carried to the United States. Thence St. Ives makes his way to France.

Meanwhile Rowley, with the help of Mr. Robbie, busies himself successfully at Edinburgh to bring about an investigation into the circumstances attending Goguelat's death. Chevenix, conceiving that Anne would never return, and wishing to appear in a magnanimous light before Flora, comes forward as the principal witness, and, by telling what he knows of the duel, clears his rival of the criminal charge hanging over him.

Upon the restoration of the monarchy, the Vicomte de St. Yves being discredited and ruined, Anne comes into possession of his ancestral domains, and returns to Edinburgh in due form and state to claim and win Flora as his bride.

S. C.

THE END.

A MODERN MIRACLE.

By H. G. Prout.

IN the second volume of Kipling's "Jungle Book" appears a story, which is not a jungle story, entitled "The Miracle of Purun Bhagat." The main facts told are that a great landslip one mile long and 2,000 feet high came down into a valley and overwhelmed a village, and that the villagers were warned by a holy man, Purun Bhagat, and fled across the valley and up the other slope and were all saved. The only life lost was that of Purun Bhagat himself.

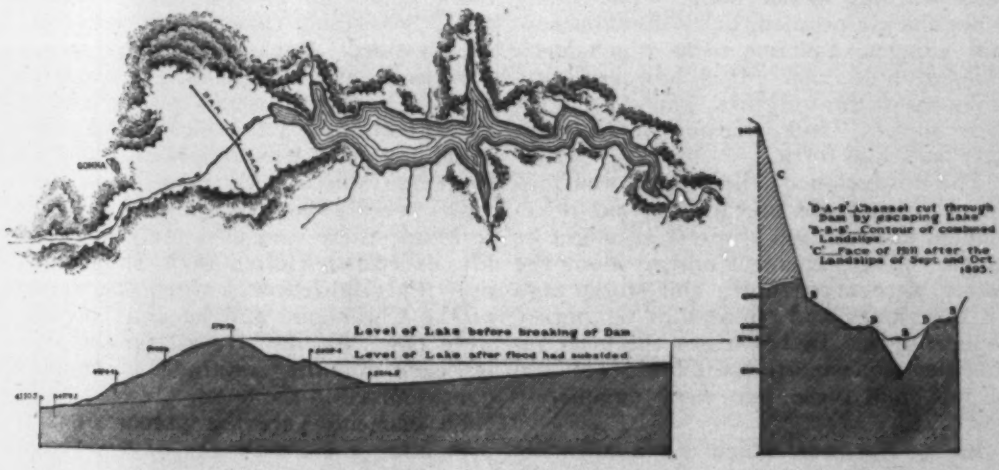
I propose to tell the real story, very briefly, for much of this did happen, and the facts are to be found in official documents lately made public. It is quite possible, however, that the landslip of which Kipling tells and that of which I shall tell were not identical.

There was what might indeed seem to the ignorant a miracle, but it was only an exhibition of applied knowledge and intelligence and of official zeal and devotion. An appalling landslip did occur villages were swept away, a valley was devastated, and the only lives lost were those of a fakir (religious beggar) and his family.

On the northwestern frontier of India, in the flanks of the Himalayas, is a small stream, the Birahi Gunga, a tributary of the Ganges. High up on this stream is the little village of Gohna, and that is where the miracle took place.

In September, 1893, an enormous bulk of rock and earth slid down the mountain side into the river, and in October of the same year was another great landslide. The mountain from which this material came down rises 4,000 feet above the bed of the stream. The dam which the material formed across the valley was about 900 feet high and 3,000 feet long, as measured across the gorge. Of course the formation of this dam would convert the stream above it into a lake, and it was calculated that when the water should reach the level of the top of the dam, it would cover an area of about one and one-third square miles and would contain about 16,650 million cubic feet of water, about as much water as could be carried in 500,000 of the biggest freight trains.

All of this was apparent to every one; but back of all this the British officers, civil and military, who were in charge of the affairs of that region, saw certain other truly awful facts. Some time the lake would fill and the water would begin to rise over the crest of the dam. But there being no masonry protection, the water would begin at once to cut away the crest and the face of the dam, and the breach started, it would increase by swift leaps, as greater and greater volumes of water were let loose, till the whole lake would be released, to sweep in one vast wave down the valley. This process of breaking down begun, the end would not be a matter of days, but of hours. Between the first trickling overflow and the


Level of Lake before breaking of Dam
Level of Lake after flood had subsided
'B-A-B' Channel cut through Dam by escaping Lake
'B-B-B' Contour of combined Landslips
'C' Face of hill after the Landslips of Sept. and Oct. 1893.

escape of the mass of the water, probably less than a day would elapse, possibly only a very few hours. In fact, seventeen hours after the first overflow did take place the great flood was let loose.

That all this would happen was not speculation; it was human experience. It was exactly what happened at Johnstown, Pennsylvania, in 1889, when several towns were wrecked and 5,000 lives were lost; only the Gohna dam was fourteen times as high and three and one-quarter times as long as the Johnstown dam, and the water held back was twenty-six times as much. All this the British officers knew was before them. What could they do to save lives and property, and how much time had they to do it?

From surveys they knew the area of the watershed from which the water would come to fill the lake, and from records they knew the ordinary rainfall; and so in the autumn of 1893 they calculated that the overflow would begin August 15, 1894. It actually began August 25th. No doubt the officers intended to make the error on the safe side, and hardly expected the overflow to take place as early as August 15th.

Having satisfied themselves when the flood would take place, they began to prepare for it. They built a telegraph line from Gohna, down the river, 150 miles, and established stations at all important points. They put up pillars of masonry on the slopes of the valley: in the upper part 200 feet above ordinary flood level, and farther down the valley, 100 feet above floods. These pillars were established near all villages and camping-grounds, and at intervals of half a mile down the river. The people were directed to retire above the line of pillars when they should receive warning of the flood. The valley is not thickly peopled, but it contains several villages, and one town which has a population of 2,000. It is, however, a famous resort for pilgrims, and is studded with shrines, and streams of devotees pass back and forth.

The protection of the people was provided for by these precautions, but it remained to save such property as might be saved. The permanent bridges along the valley were taken down and stored high up the slopes and replaced by temporary rope bridges. In two cases the local authorities requested that the bridges should be left, and these two were completely destroyed.

Below Hardwar, which is 150 miles below Gohna, at the mouth of the valley, are situated the headworks of the great Ganges Canal. A flood coming down the valley might destroy these and greatly injure the works farther down. This in itself would be a terrible calamity, for the agriculture of vast regions depends upon this canal. Therefore, measures were taken to protect the canal works by dams and other constructions more or less substantial.

When they had done all they could the officers waited for the flood. At half past six on the morning of August 25th, a little stream began to trickle over the dam. At two o'clock in the afternoon a message was sent down the valley, saying that the flood would come during the night. A thick mist overhung the lake and the dam. At half past eleven at night a loud crash was heard, a cloud of dust rose through the mist and rain, and the flood roared down the valley.

Just below the dam the wave rose 260 feet above the ordinary flood level. If this wave had swept down Broadway, it would have risen to the cornices of some of the recent twenty-story buildings. Thirteen miles below the dam the wave was 160 feet high; and seventy-two miles below, at Srinagar, it was forty-two feet above ordinary flood level; and at Hardwar, 150 miles down the stream, at the mouth of the valley, the wave was still eleven feet high. The average speed of the flood going down the valley, in the first seventy miles of its course, was estimated at about eighteen miles an hour; but in the upper twelve miles it must have moved at a rate of over twenty-seven miles an hour. In four and a half hours 10,000 million cubic feet of water, almost two-thirds of the whole contents of the lake, were discharged. This mass weighed more than 300 million tons. Nothing could withstand that weight moving at such a speed. Rocks were ground to dust. The town of Srinagar was entirely destroyed, with the rajah's palace and the public buildings; and a thick bed of stones, sand, and mud was deposited where the town had stood. All the villages of the valley were swept away; but, wonderful to relate, there was absolutely no loss of life, except the Gohna fakir and his family. This old fellow scorned the warning of the Christians, and he and his family were twice forcibly moved up the slope, but each time they returned, to be finally overwhelmed in the flood.

So efficient were the preparations for protecting the headworks of the Ganges

Canal that these were but slightly injured. The whole cost of the protective work and the value of bridges and public property destroyed amounted to 2,500,000 rupees. The official value of the rupee in 1894 was thirty-two cents, and, therefore, this sum was equal to $800,000. This does not include the destruction of private property, of which no estimate has been made.

To save the people of the valley and to save the Ganges Canal required more than mere knowledge. It required moral courage and resolution. The officers had to reckon with the ignorance and incredulity of the people, as shown in the case of the old fakir. They had also to meet opposition in high places, for there were men in the government who did not believe that the dam would fail even when the lake overflowed, and there were others who wanted plans tried which, as events proved, would have been useless.

The annals of the British conquest and government of India are full of instances of the fitness of our race to govern, but this little tale illustrates, perhaps as well as any of them, those qualities of faith in acquired knowledge, zeal in the performance of duty, and courage and efficiency in action which have made it possible for the English-speaking people to govern one-third of the habitable globe and one-fourth of the population of the earth.

AN UNJUST ACCUSATION.

By Robert Barr,

Author of "In the Midst of Alarms," "The Mutable Many," etc.

THERE are houses in London which seem to take upon themselves some of the haracteristics of their inmates. Down the steps of a gloomy-looking dwelling you generally see a gloomy-looking man descend, and from the portal of a bright-red brick façade, incrusted with terra-cotta ornaments, there emerges a fashionably dressed young fellow twirling a jaunty cane. The house in which a terrible murder has been committed, usually looks the exact place for such a crime, and ancient maiden ladies live in peaceful semi-detached suburban villas.

In like manner famous club buildings give forth to the observant public some slight indication of the quality of their collective members. The Athenæum Club looks for all the world like a respectable massive book-case, made last century and closed up. One would expect, were the walls opened out, to see row upon row of stately useful volumes, like encyclopedias, and solid works of reference, strongly bound in sober leather. The Reform and the Carleton, standing together, resemble two distinguished portly statesmen, of opposing politics, it is true, but, nevertheless, great personal friends. The clubs where good dinners are to be had seem to

bulge out in front, and you can almost imagine a phantom hand patting a distended waistcoat with supreme satisfaction. The university clubs remind one of the architecture of Oxford and Cambridge. A benignant and holy calm pervades the clerical clubs, and the hall porters look like vergers; while there are wide-awake and up-to-date clubs on Piccadilly, frequented by dashing young sparks, and the windows of these clubs almost wink at you as you pass by.

Of no edifice in London can this theory be held more true than of the gloomy, scowling building that houses the Royal Ironside Service Club. It frowns upon the innocent passer-by with an air of irascible superiority, not unmixed with disdain. If you hail a hansom and say to the cabman: "Drive me to the Royal Ironside Service Club," the man will likely lean over towards you and ask with puzzled expression:

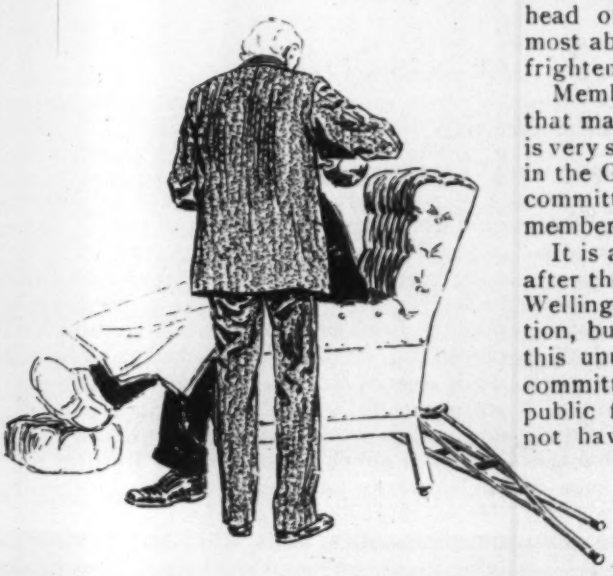
"To *where*, sir?"

But if, instead, you cry in snarly, snappy tones:

"The Growlers!" he will instantly whip along towards St. James's quarter, and draw up at the somber entrance of the Ironsides, expecting with equal certainty to be well paid and found fault with.

"Like Admiral Sir Stonage Gradburn."

The membership of the Growlers is made up entirely of veterans from the army and navy, all of whom have seen active service and most of whom have records for exceptional bravery. There are many armless sleeves in the club, and it has been stated that among the five hundred members there are only seven hundred and twenty-three legs, although this cannot be definitely proved, for some cases of gout may have been mistaken for a patent leg. This question might be solved if all the members were like Admiral Sir Stonage Gradburn, who wears in plain sight an oaken leg strapped to his left knee, just as if he were a Portsmouth sailor, and on this he stumps sturdily in and out of the club, the thump of his wooden leg carrying terror to every official of the place within hearing distance. The old man will have nothing to do with modern artificial contrivances in the way of patent legs, and when a well-known firm in London offered him one for nothing if he would but wear it, the angry admiral was only prevented from inflicting personal chastisement upon the head of the firm by the receipt of the most abject apology from that very much frightened individual.



"Stop!"

Membership in the Growlers is an honor that may be legitimately aspired to, but it is very seldom attained, for the blackballing in the Growlers is something fearful. The committee seems to resent applications for membership as if they were covert insults.

It is a tradition of the club that, shortly after the battle of Waterloo, the Duke of Wellington was elected without opposition, but members speak apologetically of this unusual unanimity, holding that the committee of the day was carried away by public feeling and that the duke should not have been admitted until he was at least ten years older.

The junior member of the club is Colonel Duxbury, who, being but sixty-five years old, neither expects nor receives the slightest consideration for any views he

may express within the walls of the club building.

It is not precisely known how this collection of warlike antiques came to select James C. Norton, a person of the comparatively infantile age of forty, to be manager of the club. Some say that his age was not definitely known to the committee at the time he was appointed. Others insist that, although the club dues are high, the finances of the institution got into disorder, and so an alert business man had to be engaged to set everything straight. Outsiders again allege that the club had got so into the habit of grumbling, that at last it thought it had a real grievance, and thus they brought in a new man, putting him over the head of the old steward, who, however, was not dismissed nor reduced in pay, but merely placed in a subordinate position. Scoffers belonging to other clubs, men who were doubtless blackballed at the Growlers, libelously state that the trouble was due to the club whisky, a special Scotch of peculiar excellence. In all other clubs in London, whisky, being a precious fluid, is measured out, and a man gets exactly so much for his threepence or his sixpence, as the case may be. No such custom obtains at the Growlers. When whisky is called for, in the smoking-room, for instance, the ancient servitor, Peters, comes along with the decanter in his hand and pours the exhilarating fluid into a glass until the member who has ordered it says "Stop!" The scoffers hold, probably actuated by jealousy and vain longing, that this habit of unmeasured liquor is enough to bankrupt any club in London.

Peters, whose white head has bent without protest under many fierce complainings poured out upon it by irascible members, is said to be the most expert man in London so far as the decanting of whisky is concerned. The exactitude of his knowledge respecting the temperament and requirements of each member is most admirable. When Sir Stonage Gradburn projects the word "Stop" like a bullet, not another drop of the precious liquid passes the lip of the decanter. When Colonel Duxbury, with the modesty of a youthful member, says "Stop" in quite a different tone of voice, Peters allows about an ounce more of whisky to pour into the glass, and then murmurs with deferential humility:

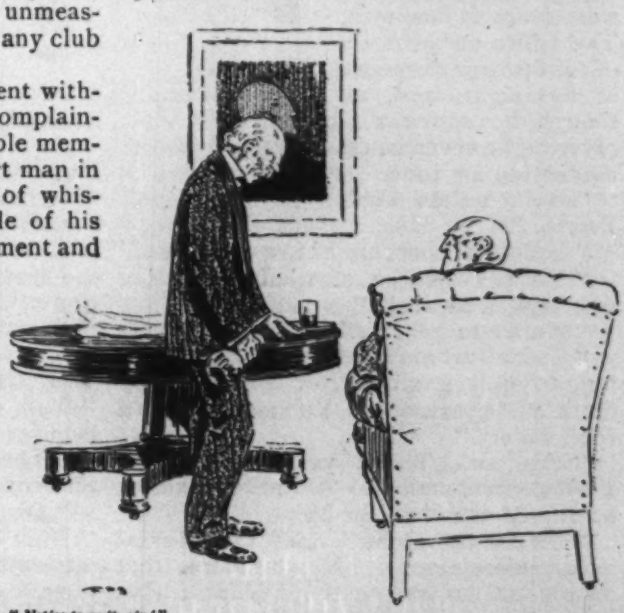
"Oh, I beg your pardon, sir."

Whereupon the colonel replies with chastened severity:

"I will overlook it this time, Peters, but be more careful in future." Whereupon the respectful Peters departs, with the decanter in his hand, saying, "Thank you, sir."

Shortly after the installation of the new manager, Admiral Sir Stonage Gradburn drove up to the Growlers' Club in his brougham, and stumped noisily through the hall, looking straight ahead of him, with a deep frown on his face. His forbidding appearance caused every one within sight to know that the British empire was going on all right, for if the admiral had ever entered with a smile on his face, such an unusual event would have convinced them that at last the peace of Europe had been broken.

The stump of the admiral's wooden leg was lost in the depths of the carpet that covered the smoking-room floor, and the old man seated himself with some caution in one of the deep, comfortable, leather-covered chairs that stood beside a small round table, Peters waiting upon him obsequiously to take his hat and stick, which the admiral never left in the cloak-room, as an ordinary mortal might have done. When the respectful Peters came back, Sir Stonage ordered whisky and the "Times," a mixture of which he was exceedingly fond. Peters hurried away with all the speed that the burden of eighty-six years upon his shoulders would allow, and return-



"Notice to quit, sir!"

ing, gave the admiral the newspaper, while he placed a large glass upon the table and proceeded to pour the whisky into it.

"That will do!" snapped the admiral when a sufficient quantity of "Special" had been poured out. Then an amazing, unheard-of thing happened, that caused the astonished admiral to drop the paper on his knee and transfix the unfortunate Peters with a look that would have made the whole navy quail. The neck of the decanter had actually jingled against the lip of the glass, causing a perceptible quantity of the fluid to flow after the peremptory order to cease pouring had been given.

"What do you mean by that, Peters?" cried the enraged sailor, getting red in the face. "What is the meaning of this carelessness?"

"I am very sorry, Sir Stonage, very sorry, indeed, sir," replied Peters, cringing.

"Sorry! Sorry!" cried the admiral. "Saying you are sorry does not mend a mistake, I would have you know, Peters."

"Indeed, Sir Stonage," faltered Peters, with a gulp in his throat, "I don't know how it could have happened, unless—" he paused, and the admiral, looking up at him, saw there were tears in his eyes. The frown on the brow of Sir Stonage deepened at the sight, and, although he spoke with severity, he nevertheless moderated his tone.

"Well, unless what, Peters?"

"... such kindly treatment."

"Unless it is because I have notice, sir."

"Notice! Notice of what—a birth, a marriage, a funeral?"

"Notice to quit, sir."

"To quit what, Peters? To quit drinking, to quit gambling, or what? Why don't you speak out? You always *were* a fool, Peters."

"Yes, sir. Thank you, sir," replied Peters, with humility. "I am to leave the service of the club, Sir Stonage."

"Leave the club!" cried the admiral with amazement. "Now, Peters, that simply proves the truth of what I have been saying. You are a fool, and no mistake. You may get higher wages, which I doubt; you may better yourself, as the detestable modern phrase goes, but where will you meet such kindly treatment as you receive in this club?"

Sir Stonage Gradburn glared at the servitor so fiercely that Peters feared for a moment the admiral had forgotten he was not on the quarterdeck and about to order the culprit before him to receive a certain number of lashes; but the eyes of the aged waiter refilled as the last words of the admiral brought to his mind the long procession of years during which he had been stormed at, gruffly ordered about, and blamed for everything that went wrong in the universe. Still, all this had left no permanent mark on Peters's mind, for there had never been a sting in the sometimes petulant complaints flung at him, and he recognized them merely as verbal fireworks playing innocently about his head, relieving for a moment the irritation of some old gentleman who had been accustomed all his life to curt command and instant obedience. Peters actually believed that the members had invariably been kind to him, and when he thought of how munificently they had remembered him Christmas after Christmas, a lump came into his throat that made articulation difficult. Although the members gave no audible token of their liking for him, nevertheless the old man well knew they would miss him greatly when he was gone, and Peters often pictured to himself the heroic ordeal that awaited his unfortunate successor in office. So the admiral's remark about the kindness of the club to him touched a tender chord in the heart of the old menial, and the vibration of this chord produced such an agitation within him that it was some moments before he could recover sufficient control over his voice to speak. An impatient "Well, sir?" from the scowling admiral brought him to his senses.

"The new manager has dismissed me, Sir Stonage," replied Peters.

"Dismissed you!" cried the admiral. "What have you been doing, Peters? Not infringing any of the rules of the club, I hope? You have been with us, man and boy, for forty-two years, and should have

a reasonable knowledge of our regulations by this time."

Peters had become a servitor of the club at the age of forty-four, and therefore every member looked upon him as having spent his infancy within the walls of the Ironside Service Club.

"Oh, no, Sir Stonage, I have broken none of the rules. I leave the club without a stain on my character," replied Peters, mixing in his reply a phrase that lingered in his mind from the records of the courts. "Mr. Norton dismisses me, sir, because I am too old for further service."

"WHAT!" roared the admiral in a voice of thunder.

Several members in different parts of the room looked up with a shade of annoyance on their countenances. Most of them were deaf, and nothing less than the firing of a cannon in the room would ordinarily have disturbed them, but the admiral's shout of astonishment would have been heard from the deck of the flagship to the most remote vessel in the fleet.

"Why, you can't be a day more than eighty-six!"

"Too old! Too *old!*" he continued, "too old for service! Why, you can't be a day more than eighty-six!"

"Eighty-six last March, sir," corroborated Peters, with a sigh.

"This is preposterous!" cried the admiral, with mounting rage. "Go and get my stick at once, Peters. We shall see if servants are to be discharged in the very prime of their usefulness."

Peters shuffled off, and returned from the cloak-room with the stout cane. The admiral took a gulp of his liquor without diluting it, and Peters, handing him his stick, stood by, not daring to make any ostentatious display of assisting Sir Stonage to rise, for the old warrior resented any suggestion that the infirmities natural to his time of life were upon him, or even approaching him. But on this occasion, to Peters's amazement, the admiral, firmly planting his stick on the right-hand side of the deep chair, thrust his left hand within the linked arm of Peters, and so assisted himself to his feet, or rather to his one foot and wooden stump. Peters followed him with anxious solicitude as he thumped towards the door; then the admiral, apparently regretting his temporary weakness in accepting the arm of his underling, turned savagely upon him, and cried in wrath:

"Don't hover about me in that disgustingly silly way, Peters. You'll be saying I'm an old man next."

"Oh, no, sir," murmured the abject Peters.

The admiral stumped into the committee room of the club, and rang a hand-bell which was upon the table, for no such modern improvement as electricity was anywhere to be found within the club. When the bell was answered the admiral said shortly:

"Send Mr. Norton to me, here."

Mr. Norton came presently in, a clean-cut, smooth-shaven, alert man, with the air of one who knew his business. Nevertheless, Mr. Norton seemed to have the uneasy impression that he was a man out of place. He looked like a smug, well-contented, prosperous grocer, who was trying to assume the dignified air of a Bank of England porter. He bowed to so important a person as the chairman of the House Committee with a deference that was not unmixed with groveling; but the admiral lost no time in preliminaries, jumping at once to the matter that occupied his mind.

"I understand, sir, that you have dismissed Peters."

"Yes, Sir Stonage," replied the manager.

"And I have heard a reason given of such absurdity that I find some difficulty in crediting it; so I now give you a chance to explain. *Why* have you dismissed Peters?"

"On account of hage, Sir Stonage," replied the manager, cowering somewhat, fearing stormy weather ahead.

"Don't hover about me in that disgustingly silly way, Peters."

"Hage, sir!" roared the admiral, who for some unexplained reason always felt like striking a man who misplaced his "h's." "I never heard of such a word."

"Peters is hold, sir," said the manager, in his agitation laying special stress on the letter "h" in this sentence.

"Hold! Hold! Are you talking of a ship? Haven't you been taught to speak English? I have asked you what reason you can give for the dismissal of Peters. Will you be so good as to answer me, and use only words to which I am accustomed?"

The badgered manager, remembering that he had a legal contract with the club which that body could not break without giving him, at least, a year's notice or bestowing upon him a year's pay, plucked up courage and answered with some asperity:

"Peters is in his dotage, sir; 'e's hover heighty-six years hold, if 'e's a day, sir."

Lucky for Mr. Norton that the long committee table was between him and the angry admiral. The latter began stumping down the room, rapping on the table with the knob of his stick as he went, as if he had some thought of assaulting the frightened manager.

"In his dotage at eighty-six!" he exclaimed. "Do you intend to insult the whole club, sir, by such an idiotic remark? How old do you think I am, sir? Do you think I am in my dotage?"

The manager, his grasp on the handle of the door, attempted to assure the approaching admiral that he had no intention whatever of imputing anything to anybody except to old Peters, but he maintained that if he was to reform the club, he must be allowed to make such changes as he thought necessary, without being interfered with. This remark, so far from pouring oil on the troubled waters, added to the exasperation of the admiral.

"Reform! The club has no need of reform."

So the conference ended futilely in the manager going back to his den and the admiral stumping off to call a meeting of the House Committee.

When the venerable relics of a bygone age known as the House Committee assembled in the room set apart for them, their chairman began by explaining that they were called upon to meet a crisis, which it behooved them to deal with in that calm and judicial frame of mind that always characterized their deliberations. Although he admitted that the new manager had succeeded in making him angry, still he would now treat the case with that equable temper which all who knew him were well aware he possessed. Whereupon he disclosed to them the reason for their being called together, waxing more and more vehement as he continued, his voice becoming louder and louder; and at last he emphasized his remarks by pounding on the table with the head of his stick

"Peters is in his dotage, sir."

"A meeting of the House Committee."

until it seemed likely that he would split the one or break the other.

The members of the committee were unanimously of the opinion that the new manager had cast an aspersion on the club, which was not to be tolerated; so the secretary was requested to write out a check, while the manager was sent for, that he might at once hear the decision of the committee.

The chairman addressed Mr. Norton, beginning in a manner copied somewhat after the deliberative style of our best judges while pronouncing sentence, but ending abruptly, as if the traditions of the bench hampered him.

"Sir, we have considered your case with that tranquillity in which any measure affecting the welfare of our fellow-creatures should be discussed, and, dash me, sir, we've come to the conclusion that we don't want you any longer. Go!"

The chairman at the head of the table scanned malevolently the features of the offending manager, while the different heads of the committee, gray and bald, nodded acquiescence. The manager, seeing the fat was in the fire in any case, now stood up boldly for his rights. He demanded a year's notice.

"You shall have nothing of the kind, sir," replied the admiral. "It is not the custom of the club to give a year's notice."

"I don't care what the custom of the club his," rejoined Norton. "My contract calls for a year's pay if I ham dismissed."

"I don't care *that* for your contract," cried the admiral, bringing his stick down with a whack on the table. "The club will not change its invariable rule for you or your contract."

"Then I shall sue the club in the law courts. You will 'ear from my solicitor."

Here the admiral, rising, poured forth a stream of language which it is impossible to record, and the members of the committee also rose to their feet, fearing a breach of the peace.

"In heaven's name," whispered the secretary to the manager, "don't anger the admiral further, or there will be trouble. Take the check now and go away without saying any more; then if you don't want the other year's salary, bring it back and give it quietly to our treasurer."

"The hother year's salary!" cried Norton.

"Certainly. It is a habit of the Growlers to pay two years' salary to any one whom they dismiss."

"Oh, I beg your pardon," said Norton, seizing the check, which he found was for double the amount which he expected. Whereupon he retired quickly to his den, while the committee set itself the task of soothing the righteous anger of the admiral.

And thus it comes about that Peters, who is, as Sir Stonage Gradburn swears, still in the prime of his usefulness, serves whisky in the smoking-room of the Growlers as usual, and the old steward of the club has taken the place so suddenly left vacant by the departure of the energetic Mr. Norton.

SWEETHEARTS AND WIVES.

By Anna A. Rogers.

MRS. ENNIS was writing as usual on the bulging old atlas laid in her lap, the traveling-inkstand at her elbow on the low window-sill. She was entirely absorbed and curiously exhilarated as she rapidly filled, numbered, and tossed aside sheet after sheet of the thinnest note-paper.

All the thought, sentiment, and passion of her being found their outlet in her letters to her absent husband. More than all else, the pathos of her starved, unnatural existence was shown by the pages she wrote of homely details that strove to make real their marriage, to keep it from becoming to them both a sort of dream—an almost fierce determination to hold him close to her daily life, hers and the children's.

It was almost three years since she and her boy had stood on the beach at Fort Monroe, up near the soldiers' cemetery, and watched the ship "all hands up anchor," swing round, and head for the Capes. Sometimes she had heard every two weeks, sometimes the silence was unbroken for three dreary months, during a long cruise to some remote island of the Southern Archipelago. Then again, while in dock at Mare Island, the letters came daily. The repairs once finished, he was again blotted from her life for weeks, and a cablegram in the papers, a mere line to say the "Mohican" had arrived at Valparaiso or Callao, with the added brief "all well," was what she lived on till the long sea letter, often a month old, came to gladden her heart once more.

She was answering a letter that had come that morning unexpectedly, brought north by a tramp steamer.

As she began to re-read it the third time in search of fresh stimulus, she suddenly started and raised her flushed face. A woman's voice was singing, as it approached along the narrow hotel corridor, a series of soft trills ending in a chromatic run that had the effect of a low, sweet laugh. There was a pause, and then a sharp tattoo on the door-panel, and the voice sang to its accompaniment:

"Un beau matin on voit là,
Un beau vaisseau rapprocher,
Et voilà ce cher Pedro,
Que la Vierge a protégé—"

Mrs. Ennis pounced upon the foreign-stamped envelope lying at her feet, piled helter-skelter into her lap the many loose sheets about her, and, throwing over all her long sewing-apron, cried:

"Come in, Alice!"

The door was thrown wide, a voice announced pompously, "Miss Blithe," and a tall, beautiful girl swept in with a burlesque grand air and courtesy. Then she exclaimed naturally, laughing and running to Mrs. Ennis:

"I'm so insanely happy to-day, please don't mind anything I do. Are you happy, too, to-day?" She looked attentively at Mrs. Ennis, who nodded her head, returning the girl's sharp scrutiny. Then they both looked hastily away. Mrs. Ennis caught up a little jacket, holding it away from her lest Alice should detect the rustle of the hidden letter, and both women talked at random about the best way to darn an obtuse-angled rent.

"Mrs. Ennis," began Miss Blithe with a rising inflection. Then she took a deep breath, and began again with a falling inflection:

"Mrs. Ennis," again a pause, and then she said rapidly:

"We ought to hear by the same mail, oughtn't we, now that Archie has been transferred to your husband's ship?"

Mrs. Ennis looked up quickly. The girl's head was on one side, critically admiring the polish of her pretty finger-nails, her hand extended. Mrs. Ennis went on with her sewing.

"As a rule, yes; but you must learn, Alice, to make allowances at this distance. A mail might go off very suddenly, and Mr. Endicott might not hear the call; be on some special duty, asleep after a watch, or ashore. You must remember the possibilities."

"Yes? How about Dr. Ennis in all this? Doesn't any of it hold good in your case?" Alice asked with dancing eyes. Mrs. Ennis laughed nervously. Presently Miss Blithe wandered to the window that looked out toward the college, across the tree-tops.

"Oh, Mrs. Ennis! There goes Preston again, on the end of the longest kind

of a whip-lash! What shall we do with that—"

Alice heard an exclamation behind her, and, turning quickly, found her friend standing amidst a great flutter of flying papers, her face full of distress. The young girl danced up to her and exclaimed:

"Oh, how delicious! You had it under your apron all the time—and look!" She dived into her pocket and pulled out a letter, waving it aloft as she waltzed around the room; and then the two women fell into each other's arms, laughing, and Alice cried in a breath:

"Mine came an hour ago, and I was so afraid you hadn't got one—the doctor might have been asleep, you know; so I wouldn't tell till I knew, and you had it all the time! And we were both trying to be so deep and sly! Isn't it lovely! Now let's sit down and compare notes."

They gathered up the scattered sheets, and were once more on a natural and apparently perfectly frank footing; but Mrs. Ennis said nothing of a paragraph in the doctor's letter, near the end, which read: "Endicott has suddenly gone to pieces. I can't quite make it out — heart, I'm afraid. Our time is up, and orders for home have not yet come. Of course we're all a good deal rattled, but it's downright poison for him in his present state."

And when Alice read extracts of her letter to Mrs. Ennis, she, too, passed over a sentence with a gasp that made the other smile. It read: "Doctor Ennis told me there were two cases of yellow fever on this ship before I joined her, and she was in quarantine for weeks. He did not write his wife about it; and you, sweetheart mine, are to say nothing to her, unless exaggerated accounts get into the papers."

When the letters were tenderly folded and put away, Mrs. Ennis took up her work again, and Alice sat down on a stool at her feet, putting her elbows on her knees and resting her chin on the palms of her hands, watching the quiet, busy mother.

"I wish I could be more like you, Mrs. Ennis. I do get so utterly weary of the endless see-saw of my moods. You are so strong and brave, and, above all, sane."

"Not always, Alice."

"Well, then it's all the more admirable, for no one ever sees the other side."

"I had a temperament very like yours when I married the doctor, and I've been frozen into what you call sanity by the strain of this life of ours. He and I have been separated six years out of eleven. Of course nowadays that is unusual, but he is not a 'Coburger'; we have no house in Washington, neither political nor social influence. When George is ordered to sea, after three years' shore duty, he goes. It's the old story of the willing horse."

"I should think you would have gone to San Francisco or Honolulu, as Mrs. French and Mrs. Atherton did. They saw their husbands twice, and had such lovely times, they wrote. Why didn't you, Mrs. Ennis?"

"We have nothing but the doctor's pay, Alice."

"Oh, I beg your pardon! I am so thoughtless," cried the girl.

"Don't distress yourself, my dear child. Fortunately, expense is the last thing you ever have to think about. I don't in the least object to telling you my little affairs. He has to help his mother in a small way, and my father has his hands full. Then, because we can't save anything, my husband carries a rather heavy—for us, of course—life insurance; and so we always sail very close to the wind." And, to Alice's bewilderment, Mrs. Ennis smiled as she went on:

"I can't be too thankful I stumbled on this little nook—fresh air for Dorothy and a good school for Preston, and, between the college sessions, the hotel practically to ourselves. And then you followed me here, and behold my own opera on demand, like a queen; your lovely rooms, and all the books, and you and your gowns, neither ever twice the same—a constant source of delight to me."

"Oh, really!" and the girl's white face flushed with pleasure, and her eager young eyes drooped shyly like a child's.

There was a short silence, and Mrs. Ennis sewed buttons on a pile of little shabby shoes, and Alice put a liquid blacking on them, and laid them one by one on a newspaper to dry. Finally, the latter said:

"I was so glad to come, for Aunty is not very sympathetic about my engagement to Archie, you know. She doesn't object to the Mr. Endicott, but the Lieutenant Endicott. She declares she doesn't understand anything about the navy—never even heard of it before—and she's much too old to begin!"

"I fancy Mrs. Percy thinks it a little vulgar, Alice; many people do until—well, there's a war scare."

"You won't breathe it, will you, Mrs. Ennis, even to the doctor, if I tell you something?" Alice took a deep breath.

"I fairly hurled myself at Archie before he would propose!"

"I fancy you," said the other, with a laugh.

"Of course that sounds worse than it really was, because I knew perfectly well, ever since that winter in Washington, that he—liked me; and that it was only all this horrid money poor papa left that came between us—that and his stupid pride. You see, Aunty and I were at home in New York before the 'Mohican' sailed, and he kept coming to the house, and sometimes he would only stay ten minutes and then rush off, saying he had a watch to stand, or was on a board of survey, or had promised to take somebody's relief—whatever that means. He was so irritating, you can't believe! Well, one day those lawyers wrote me one of their tiresome legal letters that take four sheets to say one little simple thing that I can say in two sentences. I groped around in the slough of words awhile, and finally discovered I was being scolded for spending too much money to suit them—I had to give things to Aunty, you see, to make Archie's path more smiling—and that gave me an idea. I closed the house and dragged her off to the boarding-house in Gramercy Park, where I met you. It was before Dorothy came, and my heart ached so for you and the poor doctor." Alice, holding off a tiny wet shoe, stooped over and kissed the hand pulling the linen thread back and forth through a button-loop.

The mother looked up and smiled.

"Aunty vowed she'd take me before the Commission in Lunacy. She couldn't understand why I took to wearing old traveling-dresses, and packed away all my rings and furbelows. When Archie came I assumed an anxious, careworn look, and pretended to be nervous and absent-minded. I never worked so hard over anything in all my life. And he was so bewildered, poor boy! Only a fortnight before the 'Mohican' sailed, he came one afternoon and I was more pathetic than ever. I was simply determined! Finally, he burst out with: 'Miss Blithe, what is it? I can't stand this sort of thing any longer. Won't you tell me?' And Mrs. Ennis, what do you think I said? I answered in a husky sort of way—I'd been practicing for a month—'Money!' And then—well—there was a lovely scene. Don't you like scenes?"

"My dear, I'm a woman!"

"Then what do you suppose I did?"

"You asked him to give you till to-morrow, and so forth, and so forth."

"Exactly! Wasn't it too dreadful?" cried Alice.

"Oh! we all do it. We suggest, as it were, and then retreat. You must never quote me as saying so, but I shouldn't like to tell what I think would become of the question of matrimony if we didn't."

The children dashed in, and Alice ran away, singing as she went:

"Ecoutez, Sainte Marie,
Je donnerai mon beau collier,
Si vous ferez rapporter,
Revenir mon cher Pedro."

Several weeks later, one evening after the children had gone to sleep, Mrs. Ennis sat at the table covered with a temple-cloth, absorbed in the worship of the god called *Daikoku* in the land whence came the glittering brocade.

There should have been a thread of incense burning and the tinkle of a bell to rouse the ever-drowsy god of wealth; but the supplicant had much the same attitude and expression here as there, of hunger and weariness, as she sat with clasped hands and head bowed over several little piles of postal receipts from the Navy Mutual Aid Association. There had been two extra assessments that month, and that was a financial tragedy in her life. A feminine panic had seized upon her; she must go over it all once more. It meant so much just then. She had planned so closely, and had hoped to meet her husband dressed as he liked to see her, all in brown from head to foot—as if he really cared; but it would have been one of those ultra-happinesses that all her life long had been denied her.

There was a soft tap at the door, and Alice's maid handed her a note, a mere line:

"Please come down and be audience. Aunty will not keep awake, and I must sing to-night or die! Maggie will stay with the children."

So she went, and found Alice in her maddest mood and Mrs. Percy gone to bed in her grumpiest.

Alice had felt like making a toilet that evening, and wore a beautiful gown of soft clinging gray, with white chiffon at the fair throat and wrists, that fluttered like a seagull's wings against a dull sky as she flew to the door and greeted her friend.

"You angel of mercy! I was so afraid you couldn't, or you wouldn't, or you

mustn't, or something—that subjunctive of yours is the bane of my existence." And she laughed and pushed Mrs. Ennis into an arm-chair, and placed a footstool for her, lifting each square-toed, heavy-soled boot and putting it down on the soft plush cover, one at a time, with a tenderness that did not escape her friend. Then a cushion was laid under her head, and Alice exclaimed:

"There! It's the thing nowadays to make even hanging as comfortable as possible, so it's the very least I can do for my little victim."

Mrs. Ennis gave herself up to the girl's whim, folding her busy hands on her lap.

Always of an exquisite timbre and cultivated up to the limit of the social law in such matters, Alice's voice had in it that night an additional passionate throb that sent the tears at once to Mrs. Ennis's eyes, and they stayed there through song after song.

Then the girl suddenly stopped, and wheeled round on the stool. The soft, yellow light from the shaded piano-lamp fell about her like a radiance in the otherwise darkened room.

"Isn't that enough? I never know when to stop when I have you at my mercy; you're just the dear old gallery, which doesn't know one note from another, and yet has critical emotions, fresh and honest, with none of the pedantry of the orchestra nor the subdivided interest of the boxes. I know there are tears in your eyes, and I'm afraid I can't sing anything to-night to drive them away. Life seems all in a minor key—I mean as Wagner manages it—not thinly sentimental and genteelly pathetic, but harsh and terrible, with clashing discords that make one want to scream with the agony of it all. There! my singing's better than this sort of thing, at least. I'll spare you."

She turned again to the piano and sang, without the music, Grieg, Franz, Lassen; then once more back to Grieg. Then her voice was still, and her fingers played over and over again a curious succession of chords, that ended in a sort of interrogation. Finally she said, softly:

"There's something I haven't sung since Archie went away. I feel like singing it to-night for you. You see it ends in a long, rather high note, held endlessly with a slight tremolo, dying out and coming back in a sort of echo. One evening he said it carried him back to Japan. There's a park called Shiba, near Tokio, I think he said, where there's a huge statue of Buddha, and a temple near by with a bell whose notes go ringing on and on, dying away and then returning in a wonderful way; so he called the song 'Shiba,' and this is the way it goes—" A sharp knock at the door startled them both.

"Let me go!" cried Mrs. Ennis, for what reason she never knew as long as she lived.

"The idea!" said Alice, opening the door with a laugh. A telegraph-boy stood outside, and he inquired:

"Miss Alice Blithe?"

There was a flash from her jeweled hand as she tore open the envelope the boy handed to her. An instant's silence, and with only a moan of, "Oh, my God!" the girl threw out her arms as if pushing something back from her, and fell backwards as if struck. The paper and envelope fluttered to the floor more slowly. Mrs. Ennis sprang to her feet, closed the door, calling Mrs. Percy again and again. She rang the bell and sent for a doctor—she was so sure of the contents of that hideous yellow paper—working meanwhile over the senseless girl, who lay as one dead. Mrs. Percy came in frightened and bewildered.

"What's the matter? I was sound asleep; I thought it was fire. Why doesn't Alice get up? What is it?"

"I don't know any more than you do," Mrs. Ennis found herself saying coldly. "A telegram came, and this is the result. I beg you to go at once for Maggie; I must have help."

Mrs. Percy read the telegram aloud first:

"From Montevideo. 'Lieutenant Endicott died March twentieth. Buried at sea.' Signed 'Westcott, Commander.'"

Mrs. Percy laid the paper down gently, and left the room instantly and in silence. It was then the first week in April, and they had not known.

For two days Alice was happily oblivious to everything, and the doctor made those three visits a day that represent so many fights with death. Mrs. Ennis stayed by her day and night, the children going to a neighbor's, until there was some change in the stricken girl. When the dry, white lips first moved, Mrs. Ennis bent closely and caught:

"Un beau matin on voit là
Un beau vaisseau—Pedro,"

and after that there were days of delirium, with terrible bursts of singing and pitiful laughter.

Two trained nurses came, and Mrs. Ennis took up her own life again, and with it a terror that would not leave her for an hour. The children tiptoed and whispered about their rooms, three floors removed.

After a fortnight Alice was better, free from fever, and conscious, lying almost pulseless, following with wide-stretched, vacant eyes the figures moving about her room.

Dr. Knutt did not like the looks of things, and he sent for Mrs. Ennis and told her as much, as they walked up and down together in the hall outside the sick-room.

"I want you to use your woman's wits—stir her up, wake her up, shake her up, somehow. I consider it pure philanthropy to force her to live, willy-nilly. There are plenty of good women in the world—a doctor knows that; and there are entirely too many clever ones. But beauty like Miss Blithe's is rare and owes its leaven to the lump. I know, I know!" he exclaimed, in response to a deprecatory movement of Mrs. Ennis's hands. "All the same, I'll stick to it, and a big dose of statistics once a day wouldn't hurt the whole lot of you. Well, good-night," and he stamped off down the long corridor.

Then there came the bright May morning and the telegram for Mrs. Ennis from Staten Island, which said:

"Arrived daybreak. Am well. Pack everything. Come immediately. Wire your train. Address Stapleton. GEORGE ENNIS."

Not until then did the woman's brave heart falter, much as an infant's tiny feet totter as they near the open arms at the end of their first little journey in the world. But she managed to say, quietly:

"The ship's in, Preston. Papa wants us. Take Dorothy into the other room and get her toys together."

Behind the closed door she gave way completely, and kneeling at her bedside she laid her head on her pillow—that woman's Gethsemane—which had known of her lonely, wakeful nights, the tears of weariness, and later that agony of suspense.

"It is over—it is over, thank God! Oh, my love, my love, no one will ever know what it has been," she whispered. Then she arose and walked up and down the little room, nervously patting her left hand with her right in unconscious self-pity, as she would have soothed Dorothy's woes.

The instinct of motherhood in some women even encompasses themselves. A smile came slowly to her lips, a happy light to her eyes that took ten years from her age; then she stood and laughed aloud, called the children to her and kissed them, answering twenty excited questions in a breath.

They had three hours before the express train left for New York. She had studied it out long ago, and did not lose a moment. The delight of her stinted life, the Indian rug given by the wardroom of the "Marion" as a wedding present, was rolled up and slipped into the canvas bag, and with a score of strong stitches across the end it stood ready. The diagonal flights of Havana fans came down from the walls with a rush. The children's joy, the Chinese flag with its green-backed dragon reaching out with almost vegetable ardor for the fiery sun, fell without parley. Eight little gilt-headed tacks in each room were wrenched out, and down slid the blue Japanese *chijimi* curtains. Walls, tables, and closets were stripped in a flash, the trunks packed, and in less than two hours after the glad news came, the little high-perched rooms that had been their home for so long were bare, cheerless, characterless—a home no more; simply number seventy, fourth floor.

Mrs. Ennis stood ready, dressed, as ever, two years behind the fashions, but with a glow on her plain, strong face that made her almost beautiful.

The children, in a mood for exalted obedience, sat holding hands, wide-eyed. The mother drew a deep breath of relief; then suddenly she started and exclaimed:

"Alice!"

She took off her hat, and in two minutes was standing by the girl's bedside. Her hands were cold and trembled so, she dared not give the accustomed caress. She sat where her face could not be seen, and then said gently, fighting down the throb in her voice:

"Alice, I'm going away for a little while; but, of course, if you need me or even want me—you see how conceited you've made me!—you must let me know at once. You'll do that, won't you?"

At the first word the girl turned her head with an effort, so that she could see her friend's profile.

"Your father ill?" she asked faintly, in the voice that had changed even more than her face.

"Oh, no—that is, I hope not; although you remember I told you I feel very anxious about him, and—" Mrs. Ennis

was too honest, too simple, for the task. Alice watched her intently, detecting at once, with the invalid's quickened sensibility, first the repressed excitement, then the false note.

"Are you going there?" she asked in the same slow, expressionless way.

"Oh, yes! later—that is, I must go first—elsewhere. Now, Alice, I'll write a line every day, and I've arranged with Mrs. Percy to—"

"I know what it is! I know just what it is!" suddenly exclaimed Alice excitedly, dragging herself up on the pillows. Mrs. Ennis's heart gave a bound, and then seemed to stop.

"It's our ship—it has come! Our ship has come in!" She sat erect, with dilated eyes looking ahead. Mrs. Ennis threw herself on her knees, with her arms about the girl, and buried her face.

"I'd be so glad if I could only feel anything; but you know I'm glad, don't you, 'way down under it all? I can see it, I can see it! You said it would be this way; I remember every word: First the tiny streamer of smoke 'way down the bay—it's not like other smoke, somehow; we can always tell it, can't we? And the tugs and the other things get out of the way, don't they?" and she laughed a little. "And then she comes in sight, so slowly, just creeping along, and she looks so dingy and tired, somehow, from the long, long way she's come. And then we can see the long, homeward-bound pennant fluttering, and the big black bunches of sailors in the front, and the little dark knots of officers at the back, and each one looks exactly like the one—the one we—" She stopped, and then, with a terrible cry, she threw herself forward on the bed, and broke into wild, heartrending sobs.

Mrs. Ennis struggled to her feet and ran to the door, which she found ajar, and Dr. Knutt standing there smiling. He drew her outside, shut the door, and shook her hand till it ached.

"Nothing could be better! I'm simply delighted. I knew you'd find a way. We'll have her as right as a trivet in two weeks—you'll see. Trust me a little and nature a great deal. I tell you this has saved her life. Haven't you got to plow before new seeds are sown? Well! Now you run away, and I'll send old Maggie in to her. All she needs is a little Irish babying. Confound these sailors, anyhow, for the way they have with the womenkind!" he muttered to himself when alone.

As the express train went slowly into the station at Jersey City, Mrs. Ennis exclaimed:

"Don't miss a single face, Preston!"

"Did you say a beard, mamma? I've forgotten. Maybe I won't know him; I'm so sorry," and the boy's voice broke.

"The last letter said no beard. Never mind, dear; mamma isn't at all sure she'll know him herself," and she laughed excitedly.

The train stopped, and they got out, but no one greeted them. They stood out of the line of people hurrying towards the ferries. Mrs. Ennis gripped Preston's hand and cried to him pitifully:

"Oh, my boy! do you think anything can be wrong?"

"It's all right, I'm just as sure as sure can be," the little man kept saying bravely, swallowing the rising lumps in his throat. Then a deep voice behind them said:

"Isn't this Mrs. Ennis—the wife of Surgeon Ennis of the—"

"Yes, yes; what is it? Why can't you speak?" she cried, turning fiercely. She was white to the lips, and moisture stood out on her face in beads.

"Why, mamma, it's Frohman!" exclaimed Preston, recognizing his old friend, the ship's apothecary, who said quickly:

"Dr. Ennis is perfectly well. He was detained on board, and told me to give you this," handing her a note, which she tore open, reading hungrily the hastily penciled lines:

"My darling, I'm so sorry not to meet you! You cannot feel it more than I do. The navigator is ill—there's a consultation—I had to be here. Think of his wife, and have courage for a few hours more. Seven o'clock, sure! Frohman will look after you. Go to the Gramercy Park House. Get nice rooms. Don't stint yourself. Saved a pile on the home run. Love to my babies, and God bless you—the best, bravest, truest, bonniest wife in the world!"

A TWENTIETH CENTURY WOMAN.

By Ella Higginson,

Author of "The Takin' in of Old Miss Lane," and Other Stories.

MR. DAWSON stood at the dining room window. His hands were deep in his trousers pockets. He was jingling some pieces of silver money, and swearing silently with closed lips.

The room looked more like a business office than a dining-room in a house. It was furnished handsomely, but with extreme plainness. There was an air of stiffness about everything. There were no plants in the windows; there was not a flower on the table, which stood ready for breakfast. In a word, there were no feminine touches anywhere.

Precisely at eight o'clock a strong, quick step came down the stairs and through the hall. Mr. Dawson turned with a quelled impatience in his manner. His wife entered.

"Oh," she said. She glanced at him, smiling mechanically, as one would at a child. Then she walked rapidly to a little table, and began to look over the morning mail. "Have you been waiting?" she added, absent-mindedly.

"It is not of the least consequence." Mr. Dawson spoke with a fine sarcasm. It was wasted. She did not even hear the reply.

"Ah," she said, tossing down a letter and turning to ring for breakfast. "I must run up to Salem on the noon train."

An untidy servant entered.

"Breakfast, please," said Mrs. Dawson, without looking at the girl. She seated herself at the breakfast-table, and opened the morning paper, which had been laid at her place. Mr. Dawson sat down opposite her. There was silence, save for the occasional rustle of the paper as Mrs. Dawson turned it sharply. Her eyes glanced alertly from heading to heading, pausing here and there to read something of interest. Her husband looked at her from time to time. At last he said, again with fine sarcasm, "Any news?"

Mrs. Dawson finished the article she was reading. Then, with a little start, as if she had just heard, she said: "Oh, no, no; nothing of consequence, my dear." But she read on, more intently than before.

"Well," said her husband presently, with a touch of sharpness, "here are the strawberries. Can you take time to eat them?"

She sighed impatiently. Three deep lines gathered between her brows. She folded the paper slowly, and put it in an inside pocket of her jacket. She wore a street dress, made with a very full skirt which reached a few inches below the knees. The jacket was short, and had many pockets. She wore, also, a tan-silk shirt, rolled collar and tie, and leggings. Her hair was arranged very plainly. In spite of her unbecoming attire, however, she was a beautiful woman, and her husband loved her and was proud of her.

This did not prevent him, though, from saying, with something like a feminine pettishness, "Mrs. Dawson, I wish you would remember to leave the paper for me."

Mrs. Dawson looked at him in surprised displeasure. "I have not finished reading it myself," she said coldly. "Besides, there is nothing in it that will interest you. It is mostly political news. If I had time to read it before I go down town, it would be different; but I am out so late every night, I must sleep till the last minute in the morning to keep my strength for the campaign. You cannot complain that I forget to bring it home for you in the evening."

Mr. Dawson coughed scornfully, but made no reply for some minutes. Finally he said, in a taunting tone, "It's all very well for you. You are down town all day, among people, hearing everything that is going on—while I sit here alone, without even a paper to read!"

For a moment Mrs. Dawson was angry. Here she was with an invalid husband and two children, working early and late to support them comfortably. She had been successful—so successful that she had received the nomination for State Senator on the Republican ticket. She loved her husband. She was proud of herself for her own sake, but certainly more for his sake. She thought he ought to make her way

". . . WHILE I SIT HERE ALONE WITHOUT EVEN A PAPER TO READ."

easier for her. He was not strong, and it was her wish that he should not exert himself in the least. All she asked of him was to look after the servants, order the dinners, entertain the children when the nurse was busy, and be cheerful and pleasant the short time she was at home. Surely, it was little enough to ask of him; and it was hard that he should fail even in this.

When, two years previous, equal suffrage had been graciously granted to women, Mr. Dawson, being then in failing health, had most cheerfully turned his real-estate business over to his wife. At first she managed it under his advice and instructions. He was simply amazed at the ease with which she "caught on." In less than six months she ceased to ask for suggestions, and his proffered advice was received with such a chill surprise that it soon ceased altogether.

At first the change had seemed like heaven to Mr. Dawson. It was a delightful novelty to give orders about dinners and things to maids who giggled prettily at his mistakes; to have the children brought in by the respectfully amused nurse for an hour's romp; to entertain his gentlemen friends at afternoon "smokers" (Mrs. Dawson's dainty afternoon tea-table had been removed to the garret; a larger table, holding cigars, decanters, etc., had taken its place); to saunter down to his wife's office whenever he felt inclined.

But the maids soon grew accustomed to the change. They received some of his more absurd orders with more insolence than merriment. He began to have an uneasy feeling in their presence. They really were not respectful. The nurse no longer smiled when she brought the children. What was worse, she left them with him much more than at first.

The children themselves, somehow, seemed to be getting out of clothes and out of manners. He told the nurse to have some clothes made for them. She asked what seamstress he preferred, and what material.

"I don't know," he answered, helplessly. "Get any good seamstress, and let her select the materials."

The nurse brought a friend from the country. She asked him how he wished them made.

"How?" he repeated, with some anger. "Why, in the fashion, of course." She made them in the style then in vogue in Stumpville. When he saw them, he swore. When he spoke to his wife about it, she replied, with an impatience that strove to be good-natured, "Why, my dear, I don't trouble you about my business perplexities, do I? Really, I haven't time to think of so much—with this campaign on my shoulders, too. You must try to manage better. Find stylish seamstresses—and don't trust even them. Study the magazines and styles yourself. It is quite a study—but I am sure you have time. And while I think about it, dear, I wish you would see that the roasts are not overdone."

The smokers and little receptions among the men became bores.

So many women now being in business, their husbands were compelled to maintain the family position in society. Mr. Dawson submitted. But he considered it an infernal nuisance to carry his wife's cards around with him. Sometimes he could not remember how many gentlemen there were in a family.

There was something worse than all this. He could not fail to perceive, in spite of the usual masculine obtuseness in such matters, that he was no longer welcome at his wife's office. She received him politely but coldly. Then she ignored his presence. If she chanced to be busy, she at once became very busy—aggressively so, in fact. If idle, she immediately found something to engross her attention.

In anger, one day, he taunted her with it. She replied, without passion, but with cutting coldness, that it was not good for business to have one's husband sitting around the office; that women did not come in so readily, feeling afraid that something might be overheard and repeated.

"You have a young gentleman typewriter," sneered Mr. Dawson.

"That is different," said his wife, smiling good-naturedly.

So the two years had gone by. Some things had improved; others had grown worse. Ill health and the narrow world he moved in seemed to have affected Mr. Dawson's mind. He felt that his wife neglected him. At times he was proud of her brilliant success, financial and political; her popularity, her beauty and grace. At others he was violently jealous of—everything and everybody, even the young man who musically took down her thoughts in the office.

It was absurd, of course, but he was such a beastly good-looking young fool! What business had he to put fresh flowers in her vase every day? Mr. Dawson asked her once furiously if she paid him for that. She looked at him in cold displeasure. Then she left the house, and scarcely spoke to him for a week. At the end of the week she remembered his invalidism, and relented. On the way home she bought a pretty trifle, a jeweled scarf-pin, and gave it to him with a little show of affection. He was deeply touched. Then she really loved him, after all!

Thereafter she permitted herself to become angry with him more readily. The temporary estrangement furnished a reasonable excuse to spend several nights down town with the girls; and, when she was tired of it, she had only to carry home some pretty jewel—and peace was restored. Mr. Dawson's life was becoming such a narrow, walled-in one that he was losing his spirit.

It is not surprising that Mrs. Dawson looked at him angrily over the breakfast-table. However, she made no answer to his unreasonable complaint.

"Is it necessary that you should make so many trips to Salem?" he asked, presently.

"Yes, my dear," she replied, coldly. "Unless you wish to see me defeated."

"And is it necessary that you should remain out until one or two o'clock every night?"

"It is." Mrs. Dawson spoke firmly to convince herself as well as her husband. "My dear, I have had enough of this. You were pleased—I repeat, pleased—with the idea of my running for senator, or I should not have accepted the nomination. Now, already, you annoy me with petty complaints and jealousies. I prefer being at home with you and the children, certainly; but I cannot neglect my business, or we should soon be in the poor-house. Nor can I make anything of a canvass without spending some time with the girls."

"And money," sneered Mr. Dawson.

"Yes, and money"—more coldly. "God knows I do not enjoy it; my tastes are domestic."

Mr. Dawson got up suddenly. He lifted his chair, and set it down with a crash.

"Mrs. Dawson," he said, "I don't care whether you make a good canvass or a poor one. When I gave my consent to our going into this thing, I supposed you'd run it differently. You women have been talking and ranting for the last fifty years about the way you'd purify politics when you got the ballot—and here you are run-

". . . THE CHILDREN BROUGHT IN BY THE RESPECTFULLY AMUSED NURSE. . . ."

ning things just as men have been doing ever since the United States were born."

"Oh, my dear!" interrupted Mrs. Dawson, with a little, aggravating laugh. "That is wrong, isn't it? was born would be better. Besides, why not say the earth at once?"

"And I don't care if you are defeated! I'm tired of being cooped up here with a lot of children and servants! Ordering puddings, and leaving cards on fools because you happen to know their wives in a business way, and doctoring measles and mumps! And you down town canvassing with the girls! What a home, where the wife only comes to eat!"

Mrs. Dawson arose silently and, putting on her hat in the hall, left the house. She was furious. Her face was very white. She shook with passion. What a life! What a home! What a husband for a rising woman to have dragging her down! Not even willing to help her socially! Why, it had been only two years, and here he was sunk to the shoulders in the narrow groove it had taken women centuries to struggle out of! Had she ever been proud of him? Impossible! He was unjust, contemptible, mean! Why—why—could he not be like John Darrach? There was a man, strong, fearless, a politician. He had not lost his grip. If she won, it would be because of his earnest support.

She went into her private office, and laid her head upon her desk and wept passionately.

Presently a knock came upon the door. She did not hear. The door opened, but she did not hear that either. But she felt a hand close firmly around her wrist; and then she heard a voice say, "Why, what does this mean?"

She lifted her head, and looked through her tears into John Darrach's eyes.

There was unmistakable tenderness in the look and in the pressure of his strong fingers. A warm color flamed over her face and throat. She controlled her feeling and smiled through her tears, slowly drawing her arm from his clasp.

"Forgive me," he said, instantly, returning to his usual manner toward her. "When I saw you were in trouble, I—forgot."

"It is nothing," she said, with an exaggerated cheerfulness. "Only, sometimes I fear this campaign is making me nervous. I hate nervous people," she added passionately.

"My carriage is at the door," said Darrach. He looked away from her with a visible effort. "Shall we drive out to see that piece of property now?"

"Oh, yes, indeed; I had forgotten that. How good of you to always remind me! I am afraid I depend upon you too much."

"Not as much as I wish," he answered her in a low voice. He stood holding the door open while she rapidly drew on her gloves. Then seeing the color coming to her face again, he added, grimly: "I must earn my salary as your attorney, you know."

That was a delightful morning. The road ran along the Willamette from Portland to Vancouver. The perfect blue of an Oregon sky bent softly over them. The long, silver curves of the slow-moving river wound before them. There were green fields and bits of emerald wood and picturesque islands. Farther away were the heavily timbered hills, purple in the distance; and grand and white and glistening against the sky were the superb snow mountains, majestic in their far loneliness.

The air was fragrant with wild syringa, which grew by the roadside, flinging long, slender sprays of white, gold-hearted flowers in all directions. The soft, caressing winds let free about them a breath from the far ocean.

Mrs. Dawson leaned back in the carriage and forgot domestic cares—forgot ill-bred servants and over-done roasts, shabbily dressed children and an unreasonable, fault-finding husband. She loved the soft sway of the carriage, the spirited music of the horses' feet on the hard road, the sensuous, compelling caresses of the wind on her face and throat.

Darrach stopped the horses in a shady spot.

"We must have some of this syringa," he said, putting the reins in her hands. He broke a great armful, snapping the stems almost roughly. He bore them to the carriage, and piled them upon her knees until they covered her bosom and shoulders with their snowy drifts—some of the scented sprays curling even about her throat and hair.

"Do you know," said Darrach, looking at her, "these cool, white sprays always make me think of a woman's arms." He reached for the reins, and for a second his hand rested upon hers. She turned very pale.

"By the way," said Darrach, instantly, in a light tone, "is the canvass going on satisfactorily?"

"Not quite as I could wish," she replied.

"As I expected, the lower classes are solid for—my opponent. It is a bitter thing to run against such a woman. It will be more bitter to be defeated by her."

"You must not be."

"I cannot help it. How can I get such votes?"

Darrach shrugged his shoulders.

"Put up more money," he said, coldly, but in a low tone.

"Ah," said Mrs. Dawson, with deep contempt. "It is dishonorable—disgusting! Sell my birthright for a mess of pottage?"

"Nonsense," said Darrach. He turned and smiled at her. "Am I to be disappointed in you? Have I not guided you with a careful hand through dangers and pitfalls? Have I not helped you to success? It is wrong to spend money for such a purpose—I confess it, of course. We want all that changed. We can change it only by getting good women into power. We can get them into power only through money. We must ourselves stoop at first, to elevate politics eventually. Mrs. Dawson, you owe it to the State—to your country—you owe it to yourself—to sacrifice your noble principles and ideals this time, in view of the powerful reform you, and such women as you, can bring about in politics, once you are in power."

He turned the horses into a long, locust-bordered lane. At the end of it was a large, white farm-house. A woman sat on the front steps. She was tall and thin. Her face and hands were wrinkled and harsh. Her eyes were narrow and faded. Her sandy hair, gray in places, was brushed straight back from her face, and wound in a knot with painful tightness. She sat with her sharp elbows on her knees, her chin sunk in her palms.

She arose with a little country flurry of embarrassment at their approach. She stood awkwardly, looking at them, keeping her shabbily clad feet well under her scant skirt.

"Are you the lady who wishes to borrow money on a farm?" asked Darrach.

"Yes," she said, "I be." She did not change her expression. Her only emotion seemed to be excessive self-consciousness. She put her hands behind her to feel if her apron-strings were tied. Then she rested her right elbow in her left hand, and began to smooth her hair nervously with her right hand. "Yes, I want to git $500 on this here farm. Land knows it's worth twicet thet."

"Yes," said Darrach, politely.

"It is too bad to mortgage it," said Mrs. Dawson, feeling a sudden pity. "Is it absolutely necessary?"

"Yes," said the woman, closing her thin lips together firmly; "my mind's set. My man's one o' them kind o' easy-goin's thet you can't never git worked up to the pitch o' doin' anythin'. I'm tired of it. We've set here on this here place sence we crossed the plains, an' we ain't got anythin' but land an' stawk an' farm machin'ry. We ain't got a buggy, ner a drivin' horse, ner a side-saddle; we ain't got 'n org'n, ner a fiddle, ner so much's a sewin'-machine—an' him a-gettin' new rakes, an' harrers, an' drills, an' things ev'ry year, all of 'em with seats to ride on. I ain't even got a washin'-machine!"

"But why do you mortgage your farm?" asked Mrs. Dawson, quietly.

"Because I've got my dose," said the woman, fiercely. "The place's in my name, an' now thet we've got our rights, I'm goin' to move to town. I'll show him! I'll git a job 's street commish'ner—er somepin. He can let the place out er run it hisself, jist 's he's a mind, but I'm goin' to take that money an' hire a house 'n town an' buy furniture. My mind's set. I didn't sense what a fool I be tell we got our rights. If he'd a half give me my rights afore, I'd give him his'n now; but I've got the whip-hand, an' I guess I'll git even. He never even let me hev the hen money—consarn his ugly picter!"

"Oh, I am sure it is wrong to mortgage your farm," said Mrs. Dawson, looking distressed. "Your husband must have trusted you, or he would not have put it in your name."

The woman laughed harshly, but without mirth.

"Oh, I've played my game cute," she said. "I've schemed and laid low. Back 'n Kanzus we hed a fine place out 'n the rollin' kentry, all 'n his name, an' he made me sign a mortgage on 't to buy machin'ry with—said he'd leave me 'f I didn't, an' the hull place went. Mebbe I ain't worked to lay his sphish'uns, though! Mebbe I ain't laid awake nights a-plannin' to git this place 'n my name! Mebbe I didn't git it, too!"

"But will he sign the mortgage?" asked Darrach.

"He'll hev to." She spoke with something like a snarl. "If he don't—I'll do what he threatened me with back 'n Kanzus! I'll leave him!" Her tone was terrible now.

"Let us go," said Mrs. Dawson, turning a pale face to Darrach.

He made an appointment to meet the woman in town. Then they returned to the carriage. Looking back, they saw that she had reseated herself in the same listless attitude on the steps, her chin sunken in her hand, watching them with those dull, narrow eyes.

Darrach sent the horses down the lane at a lively pace. Mrs. Dawson sat erect. Her face was pale and troubled.

"Well, that's awful, isn't it?" said Darrach, cheerfully. "It makes me suspect that this suffrage business isn't all it is represented to be."

"SHE SEATED HERSELF AT THE BREAKFAST TABLE, AND OPENED THE MORNING PAPER, . . ."

"Oh, it is terrible," said Mrs. Dawson, earnestly. "That a woman should have such a feeling"—she pressed her hands together upon her knees—"I cannot help feeling sorry for her. She is wrong, all wrong, now; yet I think I understand what a miserable, starved life she has had. I believe that the hearts of millions of women would have leaped could they have heard those words: 'If he'd a half given me my rights before!' You men have been wrong; you have not been wise. You brought this revolution on your own heads. Why, what can one expect of the kind of man that woman's husband must be, when my own husband—a man of refinement and culture—treated me like a dependent in money matters?"

"The beast!" said Darrach. She turned a white, startled face upon him. "What?" she stammered.

He laughed instantly, although a thick color mounted into his face. "Oh, I didn't mean Dawson. I was still thinking of that woman's husband." But he was trembling under strength of the feeling he was endeavoring to control.

"We must hasten," said she, "or I shall be too late for the Salem train."

Once on the train, Mrs. Dawson had three hours of hard and bitter reflection. There are certain crises in the lives of all of us when a word, a look, a gesture, is sufficient to awaken us to a full realization of some wrong that we have been committing with shut eyes and dulled conscience. Mrs. Dawson had reached the crisis in her life. Her awakening was sudden and complete; but it was crushing.

She sat with her burning cheek in her hand, looking out the window. She saw nothing—neither wide green fields, nor peaceful village, nor silver, winding river. The events of the past two years were marching, panorama-wise, before her aching eyes. Her heart beat painfully under its burden of self-accusation. Oh, blind, foolish, wicked!

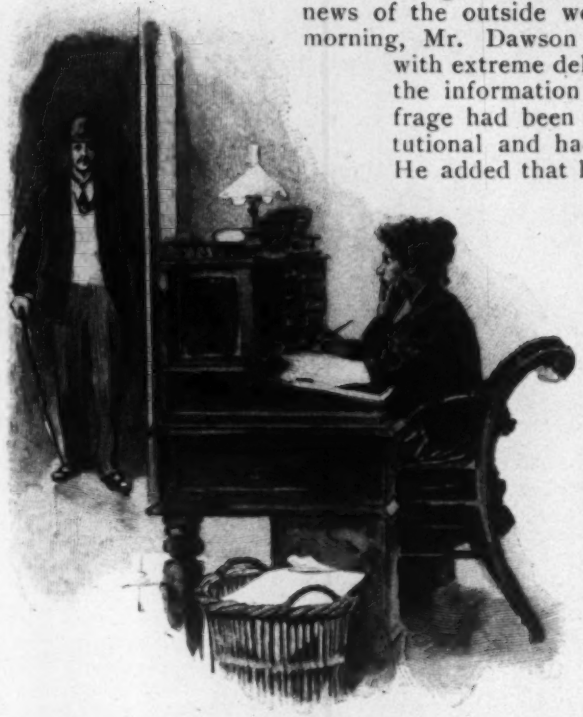
She did not care for Darrach. He was an attentive, congenial companion; that was all. But how wrong, how loathsome, now seemed her association with him!

She felt a great choke coming into her throat. She detested her campaign, woman suffrage, and, most of all, herself as she had been in these two years.

Suddenly she sat erect. "I will give it all up," she said. "I will go back to my husband and my children, from whom I

have wandered—oh, God, how far! Other women may do as they choose—I shall make a home again, and stay therein. I believe active life will restore my husband's health. We will try all over again to forget, and just be happy. Oh, I have been walking in my sleep for two years! I have awakened—in time, thank God! Every act, almost every thought, of these two years is loathsome to me now. But I shall atone. I shall make my husband and my children happy."

Mr. Dawson had spent a wretched day. Upon reflection, he was heartily ashamed of the way he had spoken to his wife. Notwithstanding their deep love for each other, he felt that they were growing farther apart each day. He blamed himself bitterly. He even thought of going down to the office and apologizing; but he remembered that she was going to Salem.



". . . HE WAS NO LONGER WELCOME AT HIS WIFE'S OFFICE.

Mrs. Dawson returned with a violent headache and fever. She had had a chill on the train. She took a cab and drove straight home. Her husband opened the door for her. "Dearest," he said. She threw herself upon his breast, and clung to him in her old dependent, girlish way, that was indescribably sweet to him.

"I am ill, dear," she sobbed, "so ill. And oh, I am so tired of it all! I have given it all up. I don't want to be a senator, nor a business woman, nor even a progressive woman; I just want to be your wife again. I want to take care of my children and my home, and I want you to be a man again!"

"Why, God bless my soul!" said Mr. Dawson. He was looking down at the back of her head with the most amazed eyes imaginable.

Mrs. Dawson went to bed without her dinner. In the morning the doctor came, and said it was typhoid fever.

It was six weeks before Mrs. Dawson was able to go about the house and to hear news of the outside world. Then, one morning, Mr. Dawson conveyed to her with extreme delicacy and caution the information that woman suffrage had been declared unconstitutional and had been abolished. He added that he had considered it his duty to take her place, and he was now running for the Senate.

"How lovely of you, dearest!" she said, with a sphinx-like smile.

Then she inquired for Darrach.

"Oh, he went off on a wild-goose chase to Australia soon after you were taken ill," said Dawson, lightly.

"Oh," said Mrs. Dawson. "And my typewriter? Is he still with you?"

"Why—er—no," said Dawson. He looked with deep attention at an old Chinaman going along the street on a trot with two baskets of vegetables dangling at the ends of a pole on his shoulder. "The fact is—I didn't just like him. He wasn't competent. I—" he jingled some coins in his pocket—"I have a very speedy young woman—er—a Miss Standish."

"Oh," said Mrs. Dawson.

When Mr. Dawson started for the office the following morning his wife followed him to the hall door. She looked charming in her long, soft house-dress. Her lovely arms shone out of the flowing sleeves. Her hair was parted in the middle, and waved daintily. A red rose glowed on her breast. The color was coming back to her cheeks, and her eyes were bright.

Her husband put his arm around her, and drew her to him with affection and satisfaction. He was fully restored to health,

and thoroughly pleased with himself. Mrs. Dawson put one arm around his shoulder, and as she kissed him, with the other hand deftly extracted the morning paper from his inside pocket—at the same time giving him a most charming and adorable smile.

Dawson's countenance fell. But he decided instantly not to remonstrate—this time. By and by, when she was stronger.

At the steps he paused and said, lightly, "Oh, I forgot: I'll not be home to dinner. Have to dine with some of the boys at the club. Infernal nuisance, this campaign!"

It requires so many exhausting lessons to teach a man anything.

A FRENCH CRITIC'S IMPRESSIONS OF AMERICA.

By Ferdinand Brunetière,

Editor of the "Revue des Deux Mondes."

NEW YORK AND BALTIMORE.—AMERICAN UNIVERSITIES.—AMERICAN CHARACTERISTICS.

NEW YORK, March 22d.—My greatest surprise is to be surprised so little; and in the mild atmosphere, under a brilliant sun, it does not seem to me that I have changed climates.

Nevertheless I am in America.

But what can you expect? My eyes and my mind are so fashioned that wherever I have journeyed I have found men more like each other than their vanity might be willing to admit; and doubtless that is not a favorable temper for "observing," but who knows whether it be not an excellent one for seeing better? How many travelers there are whose accounts have aroused in me nothing but a great astonishment at their ingenuity! They discover differences everywhere, and to my eyes these differences do not exist. Europeans or Americans, yellow men or white, Anglo-Saxons or Latins, we all have specimens at home of all the vices; let us add that the same is true of all the qualities and virtues, and repeat with the poet:

> "*Humani generis mores tibi nosse volenti,*
> *Sufficit una domus. . . .*"

. . . I am walking along Fifth Avenue, making these reflections and beginning to fear lest a spice of vexation at not possessing a more traveled soul may creep into them, when it suddenly occurs to me that this avenue is very long. I also perceive that all the streets cross each other at right angles, and that, motley as the crowd may be which fills them with commotion, numerous as are the car lines by which they are furrowed, unlike and sumptuous as are the shops which line them, the impression they produce is, after all, a trifle monotonous. Fortunately, some tall houses come to dispel this at the very nick of time—very tall houses, of from twelve to fourteen stories; cubical houses with flat roofs; pierced with innumerable windows; stone houses whose crude whiteness enlivens at last this decoration which hitherto has been all in brick. I take pains to note, then, that in New York there are houses of fourteen stories, and, must it be said? they are not uglier than if they had only five. Where is it that I have seen uglier ones, not so tall, but in the same style, or the same taste, which proceeded less from the art of Bramante or Palladio than from the science of Eiffel the engineer? Was it not perchance at Rome, in the new quarters? What astonishes me most, however, and what I can scarcely account for to myself, is that, positively, these enormous houses do not seem to be embedded in the ground; one would say they were placed upon its surface.

I go on to the right, and the aspect of the scene has suddenly changed. The flooring of an aërial railway, supported by enormous cast-iron pillars, has robbed me of sunlight, and the trains which momentarily

Editor's Note.—The author of this paper, M. Brunetière, besides being the editor of one of the most important periodicals in the world, is, perhaps, the foremost of living French critics. In it and two that are to follow (one in December and one in January) is collected whatever has particular interest for American readers in a series which M. Brunetière is now publishing in his own magazine, the "Revue des Deux Mondes."

succeed each other make a deafening racket over my head. Now the streets are lined with popular shops, saloons, oyster houses, and also with boot-blacks. Pedlars of Italian aspect offer me bananas, oranges, apples, and sticks of marshmallow. These are no longer the smells of Paris, but those of Marseilles and Genoa; in fact, they make me remember that I am in a maritime city. Did I say in a maritime city? I should have said in an island, where I ought to have found it quite natural that the manners and institutions should be "floating" (it is the remark of an ancient who had not seen America), and that the very houses should not yet succeed in "fixing themselves." A great maritime city always has a little the air of having been born yesterday; its monuments can be counted; and how often I have been surprised that of all our French cities the most ancient, the one that existed before there was a France, and even before Gaul had a name—I mean Marseilles—should also be one of the most modern, where one finds least of the historical and detects the least of what is past.

. . . There are from sixty to eighty thousand Italians at Marseilles, and formerly there were many Greeks and Levantines; this doubtless gave it the cosmopolitan aspect. Here at New York there are from four hundred to five hundred thousand Germans, and how many Irish? To say nothing of Italians, French, Greeks, Chinese, Japanese, etc. I am not surprised that all this makes a mixture, a medley in which one would be troubled to find anything very "American." The business streets, Twenty-third, Fourteenth, Broadway, are filled with a crowd, neither very noisy nor very bustling; numerous loiterers are seated on benches in the squares—a great "cosmopolitan" city; a very large city; a gigantic city; where I seem to recognize some traits of Paris and Marseilles, of Genoa, Antwerp, and Amsterdam; where certain slight differences, suspected rather than felt, fancied rather than experienced, indefinable for the moment, melt and are effaced in the multiplicity of resemblances and analogies: such did New York appear to me at first. And also as an "amusing" city, since I had been walking in it for four hours without either my curiosity or my legs having grown weary of it.

IMPRESSIONS OF BALTIMORE.

Baltimore, March 24th.—I have "descended," but only to "mount" at once to the sixth or seventh story in a fine hotel, entirely new, and in which there is nothing "American," or at least more "American" than in any other hotel, unless its being admirably kept. I cannot refrain from noting that in a city where the negro population is not less than seventy or eighty thousand souls, the hotel service is performed exclusively by whites. Strange fatality! All other travelers have lodged in extraordinary hotels. They were inundated with electric light! They were drenched with ice water! They could not make a step nor even a gesture, without setting in motion all sorts of very complicated machinery or mobilizing a whole army of negroes. Not one of these favors has yet fallen to my lot.

. . . If one excepts five or six large streets, Baltimore does not seem to be very animated, or, above all, very busy—I just now had to consult my guide-book to assure myself that it contains four or five hundred thousand souls. Have the tales of travelers positively misled me concerning the activity of Americans? What sort of epicurean or dilettante existence can they have led in Europe who find that people live so fast here, or even in New York? Or rather—and it is this doubtless which is more probable—are there not two, three, four Americas, of which it would be wrong to be unwilling to see only one? I shall not see Chicago, or St. Louis, or San Francisco, or even New Orleans; but here, in the Eastern States, I do not find myself at all perplexed, and the reason appears to me very simple. The habits of European civilization are daily becoming the foundation of American, and, reciprocally, if America makes an improvement in these habits, we hasten to adopt it in Europe.

For instance, these interminable streets crossing each other at right angles are monotonous; the picturesque, the unexpected, the variety of perspectives is absent. But has not this rectilinear ideal become ours also within the last half century and in the name of science and hygiene? Here, moreover, much more than in New York, where all the houses in a locality resemble each other, the diversity of architecture puts an element of gaiety into the monotony of the street. A touch of every style blends into a disorder which amuses the eyes. The brick is less somber, newer, and of a more vivid red; clambering greenery and the whiteness of marble steps attenuate its crudity. Stone alternates with brick. Here are houses of "colonial"

aspect, one especially which is unfailingly pointed out to Frenchmen—the old Patterson house, where that young prodigal of a Jérôme Bonaparte, as his great brother styled him, married Miss Elizabeth Patterson. . . .

The general impression of Baltimore was very well rendered by Mr. George Cable, when he said that its "aspect is quite meridional." And when he was asked to explain himself more fully, he insisted on the air of ease and the agreeable, nonchalant bearing of the promenaders in the streets—a city of leisure, a city of "residences," where the negro looks happy and the negro girls still more so. . . .

Nevertheless, I must think about my first lecture. . . .

March 25th.—My eyes wander over my audience, ascertaining in the first place that the students of the Johns Hopkins University, more courteous than our own, have not excluded women from these lectures. Doubtless they do not believe in Baltimore that the words of a professor are the exclusive property of male students, or that these words must necessarily be empty or superficial if women comprehend them. Neither do they believe, and I make the remark with singular pleasure, that the instruction given in a Protestant university should be interdicted to Catholic seminarians.

It is a short history of French poetry which I have promised to condense into nine lectures, and during the three months in which I have been thinking of my subject I have learned a good deal myself. Hence I have decided that it is especially necessary to avoid taking a purely French point of view, which evidently could not be that of either Englishmen or Americans. Something of Shakespeare, of Shelley, always escapes us; and, similarly, foreigners will never relish what we find particularly exquisite in Racine or André Chénier. Consideration of form or of pure art, which I might be tempted to put in the first rank if I were speaking in France, I relegate here to the second, and there results an arrangement or disposition of the subject which I confess I did not expect. Imperfect as are our *Chansons de gestes* and our *Romans de la Table Ronde*, I find it impossible not to give them in these lectures a place which answers to the extended influence which they once exerted in European literature and which they still exert. And where in the world should I feel myself more straitly obliged to this than here, where the sovereignly noble poet of the "Idyls of the King" has doubtless no fewer admirers than in England, and where the author of "Tristan and Iseult" may have more than in Germany? I know very well that the invention of the subject, the theme, is of small moment; and I remember most opportunely that no one, to my knowledge, has shown this better than Emerson in his essay on Shakespeare. But there is more than the subject in our "Heroic Ballads" or our "Romances of the Round Table": there is the sentiment of the subject; and nothing, to tell the truth, is lacking to them but the sentiment of form and art. I cannot devote less than three lectures to the French poetry of the Middle Ages.

On the other hand, if there should be such a thing as French classic poetry, we doubtless find it, and foreigners can hardly do otherwise, in the tragedies of Corneille and Racine, the comedies of Molière, and the fables of La Fontaine—these are really our poets—and not, I imagine, Clément Marot or Malherbe, Jean Baptiste Rousseau or Voltaire. Jean Baptiste is only a declaimer, and the other three are merely excellent prose writers who have rhymed their prose. I would still be too French—I mean too narrowly confined within the limits of our national taste—if I should try to make Americans take Boileau for a poet. Nurtured as they are in Shakespeare, I fear I should find difficulty in explaining to them and making them understand what there is "poetic," in the absolute sense of the word, in Corneille's tragedies or Molière's comedies. On this point, therefore, I will concentrate my forces. I shall bring together in one lecture all that has been attempted among us from Ronsard to Malherbe, and I will show that, as all these efforts had no other tendency, even in poetry, and perhaps especially there, than to make the court and the social spirit predominate over the spirit of individualism, this could only result "poetically" in the formation of the dramatic style on the ruins of the lyric and epic styles. I will then endeavor to show what the pure dramatic style, independent of all addition or mixture of lyricism, admits of in the way of true "poetry." And finally from Racine to the other Rousseau, Jean Jacques, putting together all of our *prosateurs* of the eighteenth century who fancied they were poets, I will point out in the long decline of our dramatic poetry and the corresponding development of individualism the near revival of lyricism.

But how am I to divide the nineteenth century in its turn? And here in Baltimore, the city of which Edgar Poe was a native and where he rests, shall I make the concession of encouraging the sympathy I am told they feel for the Baudelaires and the Verlaines? Heaven forbid! On the contrary, what I have said of Verlaine and Baudelaire in France I will repeat, merely taking account of the fact that in the conception they have formed of poetry there is something vaguely analogous to the idea, at once mystic and sensual, which the Anglo-Saxon genius seems to have formed of it now and again. And, moreover, as this idea has been developed amongst us in contrast, or even in declared hostility, to the Parnassian idea, I will explain what has been intended by the poets who have been designated in France as Parnassians. And necessarily, the far too large part granted nowadays to romanticism, in the movement of the times, will be proportionately reduced. All Europe, however, has had its "Romanticists;" and to show what analogy Musset bears to Byron will not require a long discourse. Besides, whatever one may think respectively of the *Poèmes Barbares* or the *Poèmes Antiques* and the *Légende des siècles*, there are at least as many "novelties" in the Parnassian theory as in the Romantic. And that will answer for my three final lectures, in the first of which I will attempt to define the romantic movement in itself and in relation to English or German romanticism; in the second I will show how and why the "Parnassians" have so far differed from the "Romanticists" as to become their living contradiction; and, finally, in the third, I will connect with symbolism the new tendencies I think I discern in contemporary poetry. . . .

HIGHER EDUCATION IN FRANCE AND IN AMERICA.

. . . In what relates to the organization of universities, the professors, whose kindness is inexhaustible, are here to rectify or redress what, without them, might be superficial or erroneous in my observation. It is by the aid of their conversations and their publications that I wish to say a few words on a subject which has its importance and its difficulties.

Concerning this subject, let us remember, in the first place, that institutions of superior instruction are not all of the same type in France, whatever the Germans appear to think about it, when one finds the editors of their *Minerva* jumbling in the uniformity of one continuous enumeration the Polytechnic School, the University of Paris, and the Museum of Natural History. The Museum of Natural History, the former *Jardin du Roi*, from which the great name of Buffon is inseparable, is one of the very rare institutions which are devoted amongst us to the cult of pure and disinterested science. No examinations are passed there, no diplomas or certificates are conferred; and it neither conducts nor leads to anything but an acquaintance with natural history. This is also the originality of the *Collège de France*. One learns nothing immediately practical there, and even the Chinese which is taught is not the Chinese which is spoken. Our universities are already more "utilitarian;" they grant diplomas, and these diplomas, which may have a great scientific value, have before all else a state valuation. They are at once—and this is their great vice—the official sanction of studies and a title to a career. Our universities form lawyers, physicians, and professors, and it is all the better if savants or learned men issue from them; but thus far they have not been adapted for that purpose. Finally, the great schools, such as the *École polytechnique* or the *École Normale Supérieure*, are not, properly speaking, anything but professional schools, whose first object, whose principal object, is to provide for the recruiting of certain great public employments, so that if their regulations should be heedlessly altered, the quality of this recruitment would be compromised and the entire category of great employments modified in its foundations.

There are likewise different types of American universities. There are State universities—like the University of Virginia, for instance; or the University of Michigan (Ann Arbor)—which are independent, no doubt, in the sense that they manage themselves absolutely, and yet whose independence is in some respect limited by the grant they receive from the States. Their principal obligations are to admit to the university course, without previous examination, pupils who come from the high schools of Michigan or Virginia, and to establish alongside of their liberal instruction, technical training—scientific agriculture, for example—or legal or medical courses.

Other universities, generally the oldest ones, like Harvard, 1655; Yale, 1701;

Columbia, 1754; Princeton, 1757, or, again, the University of Pennsylvania, are free from any obligation of the sort. They began as simple colleges, such as we had under the old regime, the *Collège des Grassins*, the *Collège d'Harcourt*, the *Collège des Godrans* at Dijon, where Bossuet and the great Condé made their first studies, and if I make these comparisons, it is because a pious intention, a sectarian intention, if I may say so, formerly presided in America, as amongst ourselves, at the foundation of these establishments. Episcopalians, Presbyterians, Baptists, or Quakers bore their first expenses, and some traces of their origin may still be recognized. . . . Lastly, of the other universities, the most recent are perhaps in certain respects the most interesting: these are Cornell University (Ithaca, New York), Johns Hopkins (Baltimore), Leland Stanford (California), and the University of Chicago. They owe their existence to the generosity of the founder whose name they bear, and under the supervision of an administrative council, a board of trustees which itself depends solely on the terms of a will or a donation, they are masters of their budget, of the matter of their instruction, and the choice of their professors. Why should I conceal the fact that in writing these last words I am thinking of our own universities, which may be anything you please, but which will not, in my sense of the word, be universities really worthy of that name so long as their professors are appointed by the state, and, above all, so long as the examinations to which candidates are subjected are state examinations whose programme is determined by the state, and whose diplomas constitute, so to say, state titles. I do not like false names to be given to things.

JOHNS HOPKINS UNIVERSITY.

The Johns Hopkins University, which I naturally take as a type, since I am speaking there, and also because it is as yet the only one that I have seen for myself, has existed only twenty-one years, but it long ago attained its majority. When Johns Hopkins died, bequeathing to Baltimore 34,000,000 francs for the foundation of a hospital and a university, the friends whom he had charged with the execution of his last will did not waste much time in long discussions over what concerned the organization of the university. They went to the remotest part of California, where for three years he had been exercising the functions of president of a university,—in France we would say of both dean and rector,—to look for a former professor of Yale, Mr. Daniel C. Gilman, who had very early gained a great reputation in America as an administrator.

With the correctness of eye and the rapidity of decision which are his characteristic traits and make him an eminent man, Mr. Gilman acknowledged that the occasion was unique. He saw that in a city like Baltimore, if one had the good sense to waste nothing on the empty luxury of buildings, nor on the petty vanity of copying Yale or Harvard at a distance, a type of university such as America had never seen might be realized, and he set to work. Means were lacking to organize faculties of law, medicine, and theology; they were dispensed with, and the Johns Hopkins University was composed at first of nothing but a faculty of philosophy; the name under which, in the United States and Germany, is included what we distinguish into faculties of literature and science. Ancient languages (that is to say, Hebrew, Sanscrit, Greek, and Latin), modern languages (English, German, French, Italian, Spanish), history, political economy, philosophy, on one hand; and on the other, mathematical sciences, physics, and chemistry, geology, natural history, biology, pathology; such was the programme of the nascent university. "Laboratories" and "seminaries" were its organs. The diffusion of "methods" promptly became its object, and the results are not far to seek, since within the twenty-one years of its existence the Johns Hopkins University has given not less than a hundred professors to the other universities of America. It has become a sort of normal school where the personnel of higher instruction is recruited. And it is a proof, if one were needed, that diplomas, titles, and grades, under the regime of liberty, are worth not at all, as some suppose, the stamp of the state or the notoriety of establishments, but precisely what the juries which deliver them are worth.

It is also a proof of what can be accomplished by the activity of a single man, for there is no room for error, and I am sure that not one of the professors here will accuse me of exaggeration,—the Johns Hopkins University is Mr. Daniel Gilman. It is precisely what he intended it to be; and it would not be enough to say that he is the "president" of this great body, he

is truly its soul. It would be impossible —how shall I say it?—not to conceal, and still less to dissimulate, but to envelop under a more seductive affability of manners, more of character, or to place an ingenuity of resources at the source of ideas more precise, more settled, or more ample. I wish I could reproduce entirely his Opening Address, delivered nearly four years ago, in 1893, at the inauguration of the Congress of Superior Instruction at Chicago. "The first function of a university," said he, "is the conservation of knowledge;" and could the fact that the very condition of scientific progress is respect for tradition be condensed into a better phrase? "The second function of a university," Mr. Gilman went on to say, "is to extend the bounds of human knowledge;" and it is the fixity of this ambition which has characterized the Johns Hopkins among all the other American universities. "And the third function of a university," he added, "is to disseminate knowledge." And truly it is not for ourselves, but in order to transmit them, that we have inherited the treasures of tradition or the acquisitions of experience—which is exactly what they are seeking to do here. By publications, by lectures, by review and magazine articles, by letters to the daily press, Mr. Gilman has desired the Johns Hopkins University always to keep in touch with public opinion. In France we form a more mystical, and at the same time a more practical, notion of science; more "practical" because many of our young men see little in it but a matter of examinations or an occasion of diplomas; and more "mystical" because we too often affect to be afraid lest we should vulgarize it by dissemination. . . .

THE COMING ARISTOCRACY IN AMERICA.

. . . And if, moreover, I have thought I ought to dwell at some length on this question of the American universities, it is because I have no better way of thanking them for their welcome than to do my best to make them better known; and also because, from all that I see and hear and read, there gradually emerges a lesson for ourselves. Permit me, in order to express myself clearly, to use a barbarism, and to say that, by means of these great universities, much of America is in the way of aristocratizing itself. While in France—what with our "modern education," the "specialization of our sciences," "the spirit of regionalism" with which we are trying to inocculate our universities—we are diminishing the part of general instruction, in America, on the contrary, they are seeking to extend, to increase, and to consolidate it. While we are insensibly detaching ourselves from our traditions, the Americans—who are inconsolable for not having an ancient history—are precisely essaying to attach themselves to the traditions we are forsaking. Of all that we affect to consider too useless or superannuated of the history of Greek institutions, or the examination of the books of the Old Testament, they are composing for themselves, as one might say, an intellectual past. And if, perhaps, the catalogues of their universities do not keep all their promises, which is often the case with our own, that is unimportant. The function always ends by creating its organ, and it is tendencies which must be regarded. The universitarian tendencies in America are on the way to constitute an aristocracy of intelligence in that great democracy; and, which is almost ironical, of that form of intelligence which we are so wrong-headed and stupid as to dread as the most hostile to the progress of democracy.

AMERICAN COSMOPOLITANISM.

April 4th.—. . . Before entering on my great week, and, pending eight days, of functioning for two days, one at Baltimore and the next at Bryn Mawr, I would like to summarize certain reflections. What renders this difficult is that with what there is original and local here, and of which I catch a glimpse now and again in glance or gesture, there is always blended, as in New York, a substratum of cosmopolitanism. If, having taken him for an American, or at least an Englishman, I wish to make a little portrait of Professor A——, I am informed that he is a German; it was not Germany that I came to look for in America. In the manner, the language, the countenance of Mrs. B——, something decided, precise, and energetic has struck me, but it appears that she is of French extraction. I cannot make a note of what seems to me indigenous in the manners of Mr. C—— if he spends rather more than half the year in Europe, at Paris or in Switzerland. Another person asks me what I think of Baltimore; I tell him; we become confidential; we chat; I question him; he answers me; it was a Russian! There are Italians also; there are English; there are Israelites, among whom, in truth, I am puzzled to meet an American, born

in America, of American parents. And have I not heard say that if one in three of the seventeen or eighteen hundred thousand inhabitants of Chicago were born on American soil—not merely in Chicago, nor in Illinois, nor in the Western States, but in America—it would be a great deal? Talk after that of the characters of races! Not to mention that all, or nearly all, of them have traveled, have run over the world; they know France and they know Paris; they have spent months or years there; they know Rome and Florence! No, evidently "race" has not the importance here that is given it, any more than it has in Europe; or, rather,—and from the moment that one is neither Chinese, negro, nor redskin,—it is habitudes, civilization, history that make "races;" and in our modern world, on both sides of the Atlantic, if the economists can say that the universal movement tends toward the "equalization of fortunes," it is still more true that it tends toward the effacement of all peculiarities which are not individual. An Englishman or an American does not greatly differ, as such, from a Frenchman or a German, and he differs only by having inherited a different civilization; and thanks to the facility of communications and exchanges, the development of industry, the internationalism of science and the solidarity of interests, these very differences may be reduced to differences of time and moment. The Americans are younger than we are, and that is evident first of all in their curiosity to know what we think about them.

AMERICAN YOUTHFULNESS.

They are also less "complicated," and by that I mean that they show what they are more naïvely, more frankly, more courageously than we do. Here one is what he is, and as he is so by decision or by choice he shows it. . . .

Nor is any astonishment felt because women, like men, have their clubs, where they meet to lunch, to talk about things that interest them—chiffons, housekeeping, cooking—to exchange ideas, and, at a pinch, when they are philosophers, "to comment on the Book of Job considered as an example of the miseries of humanity." Here all this appears natural. A woman belongs to herself in the first place, and, moreover, it is not required of her, as it is among us, that she should keep, so to say, four or five personages together. She is not compelled by prejudices to conceal her aptitudes or disguise her tastes. She has the right to herself, and she makes use of it.

No doubt there is some relation between this liberty to be oneself and certain independence in reference to "airs, waters, and places," and to habitudes which in Europe we convert into so many fetters, generally with regard to physical and moral surroundings. *Omnia mecum porto*, said the sage of antiquity: the American resembles this sage. Baltimore, as I have noted, is a city of residences, a city where the people are less mobilizable. They do not camp out here, they dwell; the very houses look as if they were bedded more deeply in the ground. And yet, were it necessary, one feels absolutely certain that the inhabitant would transport, ought I to say his *home?* but in any case his domicile, his habitudes, and his life to St. Louis or Chicago more easily than we Frenchmen would go from Paris to St. Germain. And the reason is not a need of change, an impatience of remaining in the same place, an inquietude, an agitation which is unable to settle down, but, in my opinion, the confidence which an American feels of being himself wherever he goes. The personality of a true American is interior. He is at home everywhere because he is everywhere himself. The displacement, the removal, which helps us to escape ourselves, gives him the sensation of his identity. Again a proof of youth and force! He will grow older; I hope he may, since he desires it; and already I can easily understand that if I should penetrate into the West, every turn of the wheels would carry me from an older to a newer world. But meanwhile, and even here where there is a little history in the atmosphere, it is certainly that which distinguishes them from us. They are younger; and is not that precisely what certain observers dislike in them?

I would not push the metaphor too far, and I do not care to report all my impressions concerning this youthfulness of the American people. It would be too easy, and, like everything which is so easy, more specious than correct. An Irishman, a German, brings to America the temperament due to long heredity. But the very circumstances into which he is plunged are such that he is obliged to adapt himself to them promptly, and a somewhat brutal selection quickly eliminates those whom it must "Americanize." One comprehends that this is because they have a good deal of pride and very little vanity. It is because they are what they are. A

German priest whom I did not know accosted me in the street the other day to complain of the condition of American workingmen, and to say, in substance, that America, no more than Europe, had solved the social question. I had no difficulty in believing him. But he forgot two points; namely, that competition is "the rule of the game," so to say, the agreement which a man signed in embarking for America—I might almost say in being born here—and he also forgot that this competition has it compensations. The distinctions which establish themselves between men here are real and solid; they do not depend, or, at any rate, they depend less than in Europe, on any caprice or despotism. Assuredly there are "Colonial Dames," but there is no old aristocracy. There are enormous fortunes; there are no "governing classes." There are professors, doctors, lawyers; there are no "liberal professions." A doctor is a man who attends others in sickness, and an upholsterer is a man who furnishes other men's houses. A rich man is a rich man, who can do a great deal as he can everywhere, but who can do only what his money can do, and an educated man is measured by the idea he gives of his merit. From this it results that every one feels himself the sole architect of his own fate, the artisan of his destiny, and generally he blames no one but himself for his failure. . . . And these observations are in the wrong by being too general . . . and what there is true in them will be modified daily; and in a fortnight, in a month, I shall no longer recognize them myself. But if I record others which seem to contradict them, I have an idea that they will all come back to this: that there being more youth in America, the civilization, the country, the very climate being newer, one breathes more deeply, one moves more freely, one lives more independently than elsewhere. It is a privilege of age: the future will tell whether it can be transformed into a social character, and what American experience is worth as gain or loss to ancient humanity.

Bryn Mawr, April 8th.—One could not imagine a college better situated than that of Bryn Mawr, in the open country, "on the slope of a verdant hill,"—of several hills, in fact,—and with horizons "made as one would have them, to please the eye." The vast buildings which compose it give me an impression of solidity which I have not before experienced. This year the number of students is 285, and not a hundred of these, I am told, intend to teach. That makes, then, in one establishment, more than 200 young girls who love knowledge for itself, and assuredly it is not I who will reproach them for it. "Learn Latin, Mesdemoiselles, and, in spite of a certain Molière, learn Greek; learn it for yourselves; and also for the little Europeans who are forgetting it every day." But I will explain myself on that point when I have time. For the moment I have duties to fulfill, for I am the hero of a reception in the "American style," which consists in being introduced, as on this evening, to two or three hundred persons, to whose obliging compliments one tries to respond as best he can by energetically shaking their hands. However, I have been practising this exercise for a fortnight, and I take pleasure in it when, in the midst of this march past, a gentleman who is watching me bends over and says in my ear: "Isn't it true that they are no uglier than if they did something else?" He was right! and I thanked him for having translated my thought so wittily. "They are not uglier." These eyes are not dimmed by reading Greek or even Hebrew, nor have they lost any of that mocking lustre which one loves to see shining in the eyes of young girls. Nor have these faces grown pale, nor these figures bent; nor, in fine, has any of that airy gaiety disappeared which was given to women, as the good Bernardin says, "to enliven the sadness of man." . . .

Baltimore, April 10th.—I have just quitted Baltimore, and I own it was not without a touch of melancholy. Eighteen days, that is very short; but speaking in public establishes so many ties, and so quickly, between an audience and a lecturer, that I seem to be leaving a beloved city. To-morrow I shall wake up in Boston.

W. S. Mallory. Theodore Waters. Thomas A. Edison.

MR. EDISON AND MR. MALLORY IN FRONT OF THE OFFICE AT EDISON,

From a photograph taken for McCLURE'S MAGAZINE on August 26, 1897.

EDISON'S REVOLUTION IN IRON MINING.

By Theodore Waters.

Illustrated from drawings and photographs made expressly for McClure's Magazine.

MILLS THAT GRIND UP MOUNTAINS AND PICK OUT FROM THE HEAP OF DUST THE SMALLEST GRAIN OF IRON ORE.—A NEW APPLICATION OF ELECTRICITY.

Editor's Note.—The deposits of iron ore in New Jersey are sufficient to supply the needs of the United States for half a century. The problem that Mr. Edison undertook to solve eight years ago was how to get the iron ore out of these mountains of rock. Any one can take a piece of magnetite, pulverize it with a hammer, then hold a little magnet over it and draw up from it little black particles which are iron ore, leaving the sand undisturbed. But to be of practical service it was necessary to do this on a scale as colossal as the phenomena of nature. Mountains must be reduced to dust, and the iron ore in this dust must be separated from four or five times its weight of sand, and then this iron-ore dust must be put into such form that it could be shipped and smelted. To ship dust in open cars would involve great waste, and the dust when thrown into furnaces would choke them, or it would be blown out by the tremendous blast of air necessary in smelting and so be wasted. Mr. Edison, therefore, had three great problems to solve. He has constructed machinery which will reduce ten tons of rock to dust every minute. He has invented apparatus whereby the particles of iron ore are separated from this dust; and after six months of almost hopeless experimenting he has been able to compress this dust into

briquettes which are thoroughly porous and at the same time absolutely waterproof. By the solution of tremendous engineering and physical problems he has unlocked fabulous sources of wealth from the New Jersey mountains. He has rendered possible a continuance of great prosperity to the blast-furnace of the East. He has laid bare supplies of iron ore which, before many years, will be called upon to supply England's manufactories.

This article explains how Mr. Edison achieved the inventions which solve this immense problem, and which have occupied almost exclusively the past eight years of his life and have cost several million dollars.

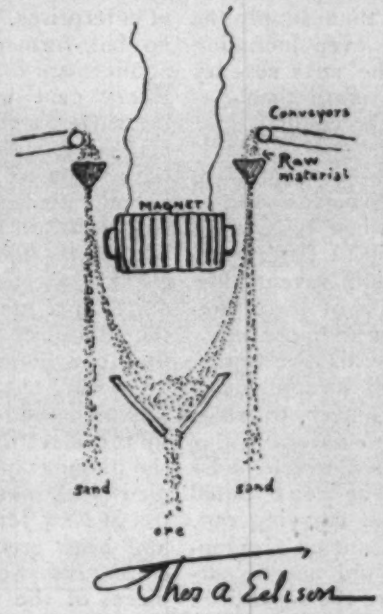
ONE day, about sixteen years ago, while Thomas A. Edison was strolling along the seashore at a point on Long Island, he came upon a pile of sand which the breakers had banked high up on the beach. He stopped and regarded it with curiosity, for it was different from any sand he had ever before seen. It was black sand. He delved into it with both hands, allowed it to run through his fingers, and even tasted it; but the reason for its inky hue remained hidden. Then, with the zeal of the scientific investigator, he took some of the sand to his laboratory and tested it. He was on the point of putting it aside, when suddenly he became possessed of an idea. He procured an electro-magnet and held it near the mass. Immediately the material became highly affected. Little dark grains separated themselves from the heap and scurried across, like so many black ants, to the spot over which the magnet was held.

The little ants were really grains of iron ore; and, strange as it may seem, Edison had discovered a bed of finely divided iron ore cast up by the sea. The black sand covered the shore in spots for fifteen miles along the coast. It was due to the erosion of Connecticut rocks by water, magnetite being one of the constituents of the primal rocks found in Connecticut. The sea, constantly eating into the heart of the rocks, had carried their scattered fragments across the Sound and cast them up on the Long Island shore. With his inventive propensities always uppermost, there entered Mr. Edison's head a scheme of conquest such as had not before been attempted. He calculated that the deposits must contain millions of tons of iron, which, could it be smelted, would be a sure relief from hard conditions then prevailing in the Eastern iron market. He worked out his ideas, and evolved his magnetic ore-separating machine, which he exhibited at the last Paris Exposition. Then he let out the privilege of using it to a contractor, who set up a plant just out of reach of the waves and proceeded to separate the iron ore from the sand, with every prospect of developing an extensive industry. But the sea proved to be less generous than it at first promised to be; for one dark night there came a storm such as had not visited the coast in many years, and when the contractor came to view his plant the next morning not a vestige of black sand remained. It had been all swept into the sea whence it came. This was the real beginning of a great industry. The final development of it, however, was due to a second discovery, quite as unexpected as the first. For some years past the bulk of the Bessemer-steel trade had been drifting westward, by reason of the discovery and opening up of immense deposits of high-grade ore in the Upper Peninsula of Michigan, suitable for making Bessemer steel, cheaply produced, and carried at small cost by water transportation to furnaces contiguous to the lake ports. The furnaces east of the Alleghanies were compelled to depend on a few small, isolated deposits of Bessemer ore in the East and ores imported from foreign countries. The ore deposits of the Southern States, as well as the magnetic ores of New Jersey and New York, are unsuitable for making Bessemer steel.

For a time the cost of the ore at the Eastern furnaces was not greatly different from the cost in the Pittsburg district; but in the last few years the cost of foreign ores, which are approaching exhaustion, has reached the prohibitory point. Then the discovery of the great deposits in the Masaba range of Minnesota in the last three years, and the tremendous cheapening in the cost of mining and transportation of these deposits, have apparently raised insurmountable obstacles in the way of the Eastern iron mills meeting the competition

of the great mills of the central West, even in the Eastern market, and many mills have ceased to operate. The condition is not a trivial one, for many thousands of persons depend upon these mills and furnaces for a living.

Mr. Edison had familiarized himself with these changing conditions and become impressed that here was a problem that ought to be solved, and perhaps could be. It occurred to him to investigate the mountain regions of New Jersey, where the iron mines are situated, with the idea that there might be some extensive deposits of low-grade magnetic ore not suitable for shipping direct to the furnaces, but from which, by crushing, he might obtain pure ore of high grade and suitable for steel-making. He constructed a very sensitive magnetic needle, which would dip towards the earth whenever brought over a large body of magnetic iron ore. What followed is best reported in his own words.



MR. EDISON'S DIAGRAM (MADE FOR THIS ARTICLE) SHOWING THE PRINCIPLE OF THE MAGNETIC SEPARATOR.

"One of my laboratory men and myself," says Mr. Edison, "visited nearly all the mines in New Jersey, without finding any deposits of magnitude, but the extent of the deposits was clearly indicated by the needle. One day we were driving across a mountain range to visit an isolated mine shown on the maps of the geological survey. I had the magnetic instrument on my lap, and my mind was drifting away from the subject in hand, when I noticed that the needle was strongly attracted to the earth and remained in this condition over a large area. I thought it must be out of order, as no mines were known to be anywhere near us. We were riding over gneiss rock at the time; so we went down in a limestone valley, where magnetic iron seldom occurs, but we found the needle went back to zero; it was correct. As we returned and traveled over an immense area the needle continued to be pulled strongly to the earth; our amazement grew and grew, and I asked, at last, 'Can this whole mountain be underlaid with magnetic iron ore?' If so, then I knew, if the grade was not too low, the Eastern ore problem might be solved.

"It was evident from the movement of the needle that vast bodies of magnetic ore, or rock impregnated with ore, lay under our feet.

"I thought of the ill-favored Long Island enterprise, and I knew it was a commercial question to solve the problem of the production of high-grade Bessemer ore in unlimited quantities.

"I determined to find out for myself the exact extent of all the deposits. I planned a great magnetic survey of the East, and it remains, I believe, the most comprehensive of its kind yet performed. I set several corps of men at work surveying the whole strip from Lower Canada to the Great Smoky Mountains of North Carolina. We used no theodolite or other instruments generally familiar to the civil engineer. A magnetic needle was our eye—our magnetic eye, so to speak. Starting in Lower Canada, with our final objective point in North Carolina, we traveled across our line of march twenty-five miles. Then we advanced south one thousand feet; then back across the line of march again twenty-five miles; then south another thousand feet, and so on, varying the cross-country marching from two miles to twenty-five, depending on the geological features of the country, as we went along. We kept records of the peculiarities of the invisible mass of magnetite indicated by the movements of our needle, until, when we finished, we knew exactly what State, county, or district had the biggest deposit; how wide, how long, and approximately how deep it all was.

"The deposits are enormous. In 3,000 acres immediately surrounding our mills there are over 200,000,000 tons of low-grade ore; and I have 16,000 acres in which the deposit is proportionately as large. The world's annual output of iron ore at the present time does not reach 60,000,000 tons, and the annual output of the United States is about 15,000,000 tons; so that in the paltry two miles square surrounding the village of Edison there is enough iron ore in the rocks to keep the whole world sup-

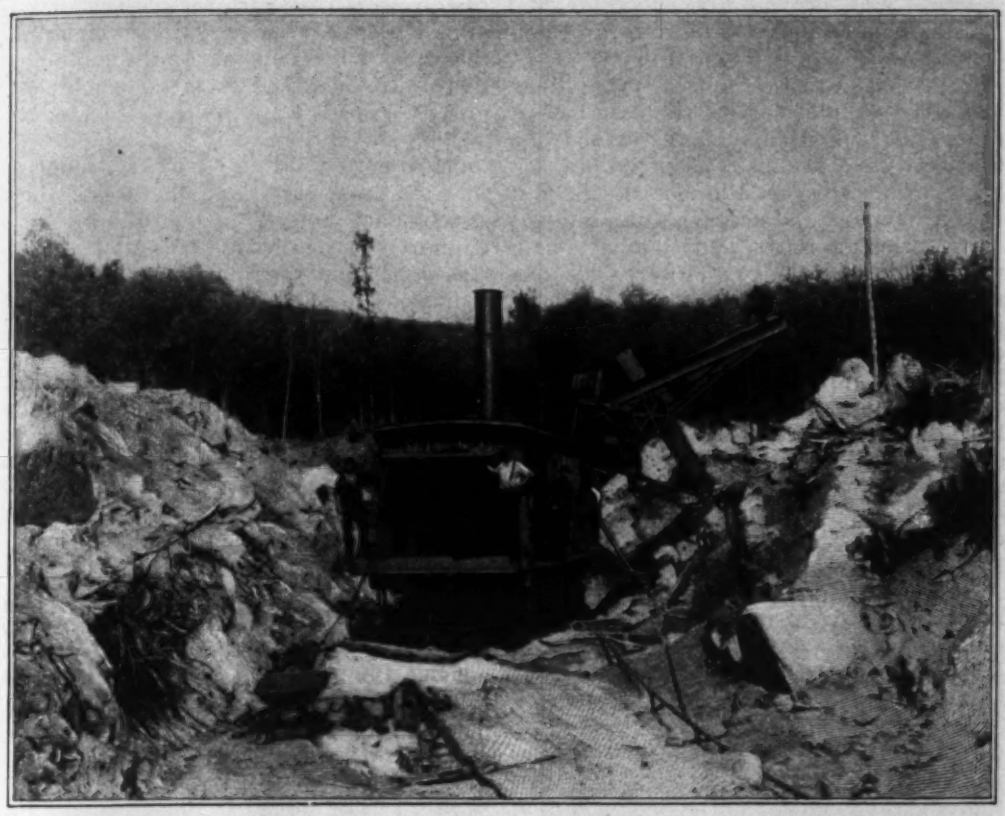
plied for one year, or the United States for three years, even with the natural increase in demand. Sixteen thousand acres, or twenty-five square miles of land, contain enough iron ore to keep the whole world supplied for seventeen years, allowing, of course, for all natural increase of demand due to the needs of a growing population. These acres would more than supply the United States with iron, even including necessary exports, for the next seventy years; and they contain more than has been mined heretofore in this country since its discovery."

Here was a remarkable condition. Smelting works shutting down for want of iron ore at low prices when billions of tons of it lay idle in a strip of land which in most places was within seventy-five miles of the great iron mills of the Atlantic coast. Mr. Edison saw an opportunity which would enable him, in his own words, "with modern methods and the application of modern science to machinery, to transform a product having no natural value into a product when mined which had a spot value on the car." The idea entailed no child's play in the final carrying out. Unless it could be carried out on a gigantic scale, it practically could not be carried out at all. To make the separation of this finely divided ore from its native rock on a scale equal to the need, the only scale commercially possible, it would be necessary to do the work at the rate of thousands of tons daily. This, at least, was Mr. Edison's judgment, and the comprehensive mind of the man is well shown in the manner in which he planned what has now developed into the most gigantic of enterprises. There was to be no hurry, no half-formed ideas, no untimely announcement of the great work to be done. Every cent which the inventor earned thereafter, and every year of his life, if necessary, were to be utilized in carrying the project to a perfect fulfillment. Discouragements and embarrassments of every nature would very likely be encountered, but these, being part of the history of every great achievement, must be taken quite as a matter of course. For them the end, fully accomplished, would more than compensate.

So while the public perhaps thought Mr. Edison to be resting upon the laurels won by the electric light, the kinetoscope, or the phonograph, his mind was really occupied with a busy little scene on a mountain top in New Jersey. A rude little building had been erected, and in it some trusted employees were engaged in breaking pieces of the rock from the surrounding hills, and, by the use of small electro-mag-

THE WILDERNESS ABOUT EDISON.

Before the timber had been felled, previous to the blasting and steam-shoveling.



THE STEAM SHOVEL LAYING BARE THE VEIN OF ORE-BEARING ROCK.

After the timber has been felled the ground is surveyed with a magnetic needle. The concealed ore-bearing rock is then staked off. The shovel works around the ledge, cleaning away the underbrush, the dirt, and the clay. Then the rock is blasted into boulders. The shovel picks up these boulders, which sometimes weigh as much as six tons, and loads them into trays, or "skips," resting on flat cars. The cars convey the rock to the crushing-plant. This shovel is the biggest in the world; it weighs 200,000 pounds, and will clear away rock at an average rate of ten tons a minute.

nets, sorting out the iron ore which these rocks contained. After a while the little building lost the distinction of being the only house so occupied, for other small buildings were erected; and then a steam plant began to make the surrounding hills echo with the puff of its engines and the continual churning sound of rock-crushers. Out of this humble beginning has grown the present great establishment. All the original machinery has now disappeared; and all the first buildings, except one small one now used as an office, have been torn down. The first steam plant and the first crushers have proved inadequate to the work.

Mr. Edison had planned the work upon a comprehensive scale, but he had reckoned upon finding equal to his needs crushing-machinery already devised. At last, however, the conviction forced itself upon him that he must invent a new method of extracting the ore from the mountain-side; construct crushing-machinery larger than had ever been used before; introduce a magnetic separating system of his own; devise some way of cementing the iron dust into lumps, so that it could be used in the blast furnace; and, altogether, to re-create the entire enterprise on a plan even more gigantic than his first conception. Engineers, tried engineers, used to large operations, smiled incredulously. Some of them spoke of the enterprise as Edison's "hobby;" others, less charitable, called it his "folly." Those of a calculating turn of mind showed him on paper that no machine could be constructed powerful enough to crush successfully five, six, and seven ton rocks; or if such a machine could be constructed, that it would never withstand the terrific jar which would result. This particular difficulty, it may be said in passing, Mr. Edison surmounted so completely that less than one hundred horse-power is required to reduce rocks weighing six and seven tons to dust in less than three seconds from the time they are thrown into the crushing-machine. Other difficulties were overcome as com-

pletely, none proving too much for Mr. Edison's indomitable will and rare concentration of mind and energy.

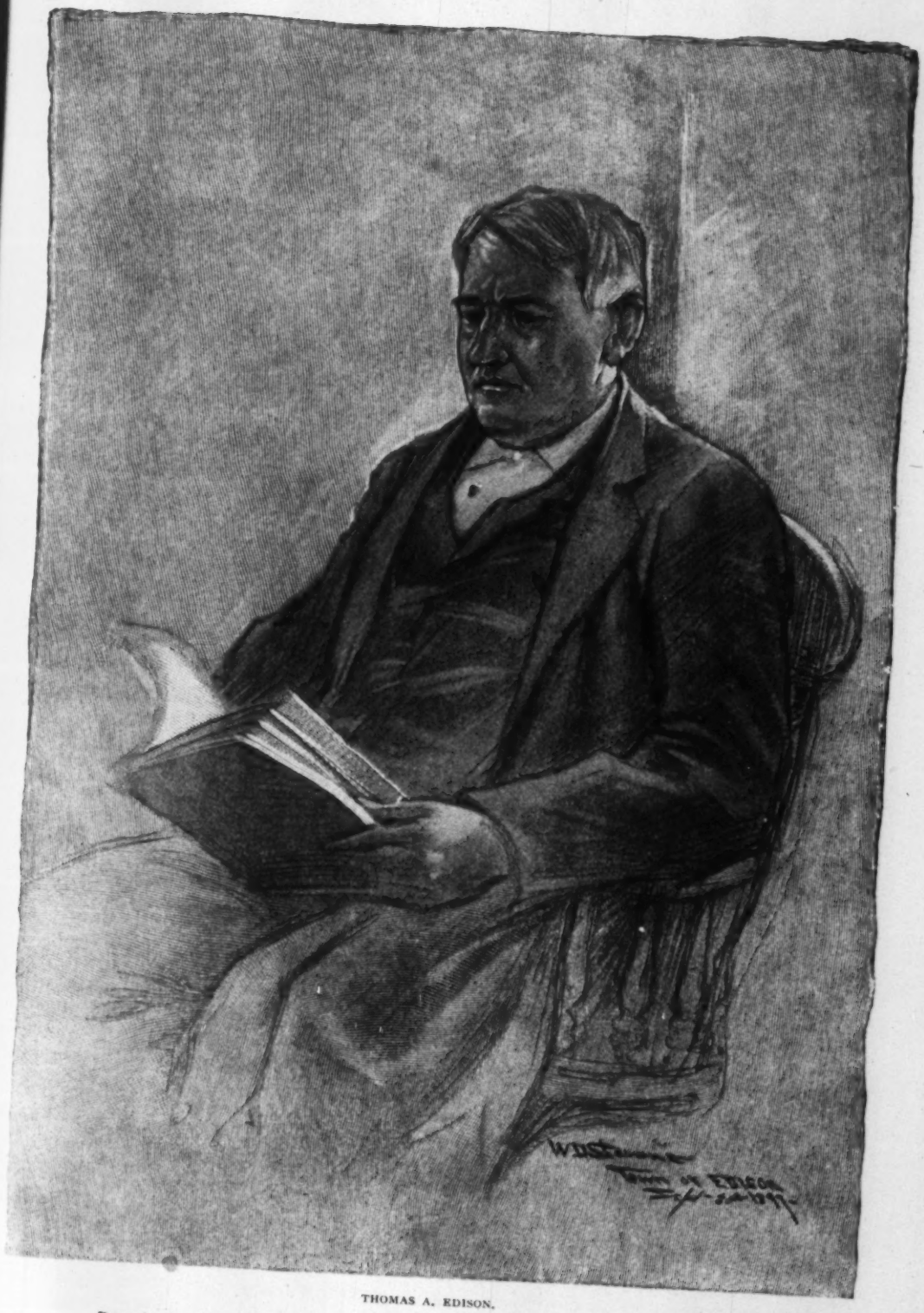
Yet what Mr. Edison really has done is a very simple matter; simple, that is, in its entirety. It may be explained in a few words. Mr. Edison is now doing on a gigantic scale just what he did at first with a hammer and a horse-shoe magnet. He is crushing rocks, and then dropping the resulting powder past powerful electro-magnets. The sand is not affected by the magnetism and passes straight on; the iron ore is attracted to one side and falls in a heap of its own. This is the whole principle. But in the actual working out it becomes one of the most tremendous processes in the world. It is, after all, no small matter to crush the very vitals out of a big mountain and then extract all of the ore from millions of tons of sand. In the middle distance between the first simple experiment and the practical working plant is a vast region full of economic detail, commercial reckoning, and mechanical devising, dependent on the difference between breaking up small rocks with a hammer and breaking up whole mountains with heavy machinery. What Mr. Edison has done has been to subdue to his service three great natural forces—momentum, magnetism, and gravity. The big rocks are not, strictly speaking, crushed by the direct power of an engine or dynamo; momentum alone turns them into dust. No mechanism assists in the separation of the ore from the sand; magnetism does it all. Except for the elevators which raise the ore to the cupolas of the buildings, there is in many of them no machinery; gravity does all the work. In fact the whole plant is a wonderful example of automatic action. Every part is connected with the other parts, and the aggregate is as compact and as self-sustaining as a modern rotary printing-press, and is even less dependent on human agency for assistance.

From the time the ore is blasted with its native rock out of the mountain-side until it is loaded in the form of commercially pure iron briquettes on the cars, it is not touched by human hands. The never-ending and never-resting stream of material constantly circulates through the various buildings, crushed by the stored momentum of gigantic rolls; hoisted skyward by steam; pulled earthward by gravity; deflected by magnetism; dried, sifted, weighed, gauged, conveyed; changed from rock into dust, and from dust into comprehensive lumps, mixed with a due proportion of adhesive material; churned, baked, counted, and sent flying to the furnaces by fast freight; and not once in its course is it arrested or jogged onward by human agency. The noise of the crushing, the grind of the machinery, the dust and the onrushing stream of this "most precious metal" and its by-product, separate the 145 attendants as with the breadth of continents. Yet these men, merely watchers to see that all goes well, are within signal distance of one another in spite of the noise, the dust, and the grind; and the touch of a button quells the monstrous disturbance in the smallest fraction of time.

AN ACCIDENT TO THE STEAM SHOVEL.

The steam shovel seems to be as voracious as a great animal. Sometimes it attacks rocks which are too big even for its own great maw. In its effort to overcome a great rock it lost its balance and tipped over.

The complete subjection and masterful control of great natural forces is one of the most impressive aspects of the whole enterprise. It is one thing to set the ball in motion; it is quite another to control its velocity or direct its course. The crushing capacity of all the stamp-mills in California is about 5,000 tons a day. The crushing capacity of Edison's giant and lesser rolls is twenty per cent. greater than that of all these mills combined; enough to level in an ordinary life-time the proudest of mountain peaks. The



THOMAS A. EDISON.

Drawn expressly for McClure's Magazine by W. D. Stevens, at Edison, September 30, 1897.

THE STEAM SHOVEL WORKING AT NIGHT.

In the great chasm which is being cut across the summit of Mount Musconetcong the work of taking out the ore-bearing rock goes on night and day. As much as 32,000 tons are taken off at a blast.

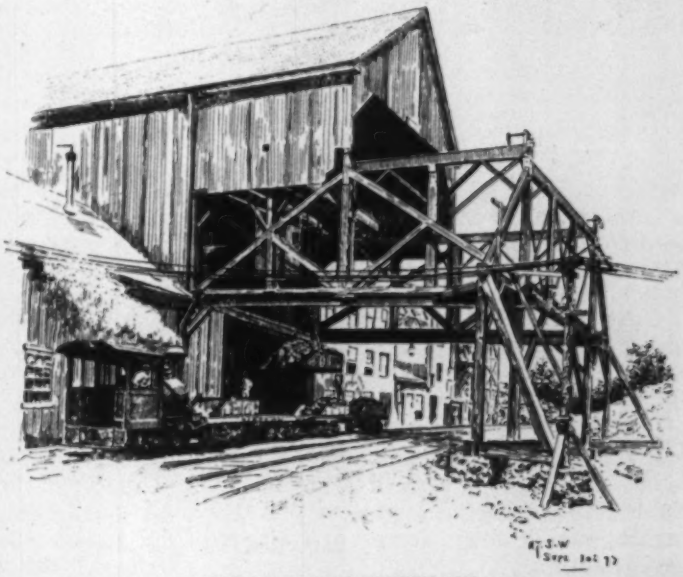
long line of magnet faces have, popularly speaking, enough combined pulling capacity to raise a modern great gun clear from its deck facing and drop it over the side of the vessel into the sea. The great steam shovel which so ruthlessly tears the underbrush, the rock, the dirt, and the ore from the mountain side, is already famous, for it has done extraordinary work elsewhere, having been the excavator of the larger part of the earth that was removed from the Chicago drainage canal, and having served also in the great ore mines of the Masaba range. The conveyers that carry the rock, the sand, and the ore from mill to mill, covering a mile in transit, lift in sections 100,000 cubic feet of mountain-side every day—a Herculean accomplishment if ever there was one. Yet behind it all, with not in the least the demeanor of a conqueror, is the personality which planned it all, with forces arranged to continue indefinitely this comprehensive demolition of mountains, but with invisible wires outstretched, so that if necessary the whole vast turmoil of machinery may be silenced on the instant.

The way to the plant leads up the steep sides of one of the back spurs of the Musconetcong Mountains; past Lake Hopatcong, with its crowd of pleasure-seekers; beyond Hurd, with its iron mines, from which ore was taken more than a hundred years ago; through virgin forest undergrown with rank, dank masses of fern; upward, always upward, until the 1,200-foot level is reached; and the snorting, puffing little engine darts forward into a nest of tall red buildings from which a dull booming noise sounds forth and a choking white dust blows out. The activity roundabout is of that massive order which reduces one to a condition of awe and helplessness similar to that experienced in an earthquake-ridden country. One feels that the very ground under one's feet may suddenly yawn at the displeasure of the master mind which created the community. On all sides the roar and whistle of machinery, the whir of conveyers, and the choking white dust proclaim this to be some quite extraordinary enterprise. The workmen look like millers, so coated do their clothes become with the flying white particles, and everyone wears a patent muzzle. The effect of the pig-like snout which the muzzle closely resembles is often very amusing. The magnet-house and some of the other buildings are almost as tall and as narrow as city "sky-scrapers." Others are flat and squatty, covering considerable areas. Big wheels revolve in the engine-houses; big dynamos transmit their heavy currents through overhead wires to the various parts of the plant. Little narrow-gauge locomotives puff their way in and out between the buildings; a line of freight cars moves slowly along, with shrieking and whistling

wheels and brakes. Far off one can see a great bridge-crane, its top lifted above the tree-line; and presently the cry of a child startles one into a quick view of "Summerville," a hamlet where the miners live.

This is Edison the place; where is Edison the man? "Probably over watching the steam shovel. He is always there. It seems to fascinate him. Follow the water-pipe through the cut," says one of his men. The iron water-pipe lies on the surface, and it leads in a tortuous manner between the numerous buildings and out into the open country. On the way over we receive our first impressions of this great system of ore production. Over to the right, lumbermen are cutting down trees and making the land ready for the steam shovel, which is tearing away at the rocks half a mile distant. Further over, on a half-cleared section, a great stream of water rushing through a hose with mighty force from a hydraulic pump is washing the débris free from the rock and leaving the latter bare of all vegetation. Still further along, the rattle of steam drills and the boom of dynamite tell where the rock is being riven into boulders and loaded on the five-ton skips, or trays, prior to being transmitted to the crushing-plant. The steam shovels do the work of loading, and as they have a capacity for lifting ten tons of free rock a minute, the local activity is tremendous; and the flat cars, carrying two skips each, move along at a lively speed. A long line of them is constantly leading up to the crushing-plant, where the big electric cranes rid them of their loads and a little switching engine pushes them around a loop and allows them to run down an incline into the cut again.

Edison, descried in the distance by means of his historic linen duster and his great country straw hat, is found sitting on a stone, peering earnestly down into a great trench from which the most surprising grunts, shrieks, whistlings, and queer noises generally are being emitted. It is the complaint of the steam shovel, than which there is no more human-like piece of mechanism in the world. Edison looks up pleasantly as you approach. His manner is encouraging. There is, as some one has said, the assurance of honesty in his strong, round face, and an attitude of democracy in his dirty duster, which makes you friends with him at once. There is no air of self-importance, which, after all, one could easily pardon in the man for whom the French people played our own National anthem on his entrance to the Paris Opera House—honored him, in fact, as they only honor kings. As you talk, he places his hand to his ear; but it is not to exclude the roar of the crushers, the whir of the conveyers, or the noise of the shovel. He is slightly deaf; a condition, however, which he regards more in the way of a boon than as a misfortune, for it excludes the small talk of those about him and enables him to concentrate his mind on whatever problem he may have in hand. His face, when his mind is bent on serious matters, reflects the deep import of his thoughts; but he is always ready to unbend, and his change of demeanor when some lighter vein of conversation is struck seems to come as a relief. He is as ready for a funny story as was Lincoln, and several of his best jokes are decidedly on himself. A query on a scientific subject reforms the wrinkles of thought on his face, and he becomes lost completely to all sight, sound, and feeling of the out-



EXTERIOR VIEW OF CRUSHING-MILL.

The skip-loads of blasted rock are conveyed on flat cars to the mill. Great electric cranes lift them at the rate of one a minute up into the second story of the mill, where their contents are dumped into the roll-pit.

THE ELECTRIC CRANE DUMPING A SKIP-LOAD OF ROCK INTO THE ROLL-PIT.

Ten feet below the flooring two immense rolls, with surfaces studded with teeth and weighing over 100 tons, are constantly revolving.

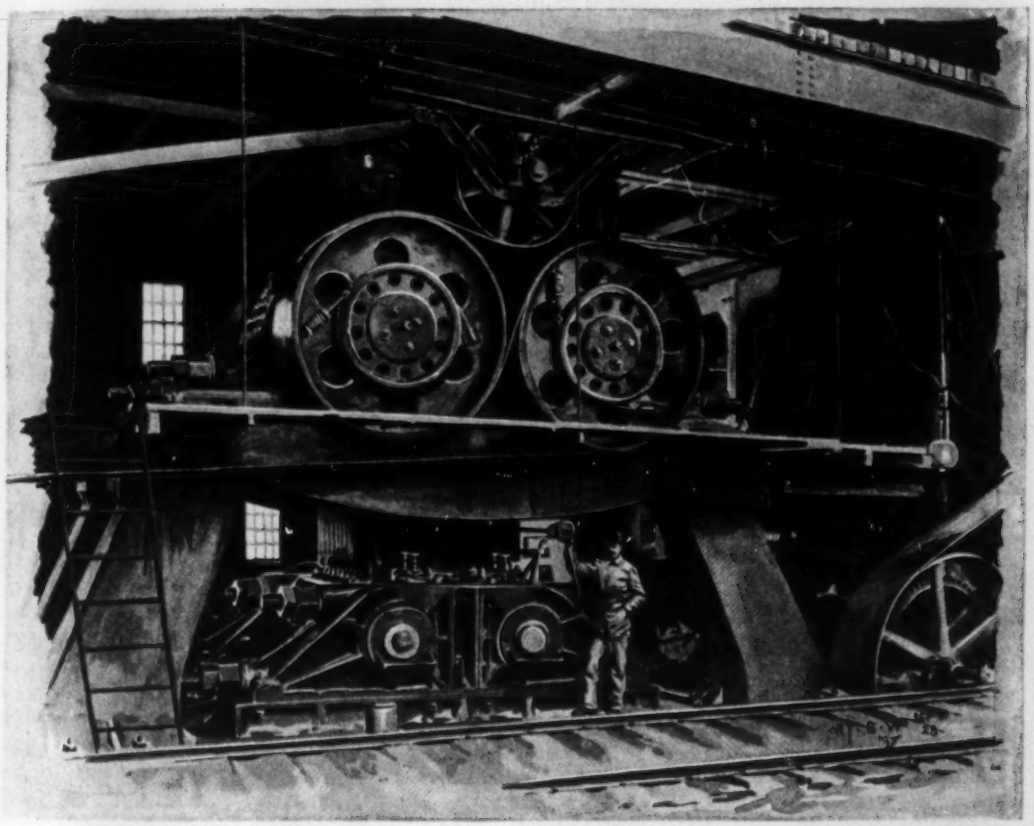
side world. A laborer, dressed even more shabbily than Edison himself, comes up, and from a distance of ten or a dozen feet growls out a question about some new braces which are being put in. Edison grunts back his answer in quite the same tone of voice, and a moment later is off, with short, quick steps, and an intense look, towards a group of men holding a consultation over some mechanical difficulty connected with the plant. Edison solves the problem almost as soon as it is laid before him, and presently is back again, gazing down at the first object of his attention.

"We are making a Yosemite of our own here," he says; "we will soon have one of the biggest artificial cañons in the world." This remark is occasioned by the fact that the steam shovel is operating at a point three-quarters of a mile from the works proper. It is somewhat down the hillside, but it is eating its way on a level straight into the hill. "It will take us a year to reach the mills," says the inventor; "but when we do get that far in, we will have a trench with walls one hundred feet deep. I suppose we will take out over 600,000 tons of rock before we get there. Then when the trench is completed, we can blast off the walls with dynamite, taking off 32,000 tons at a time. But look at this fellow," he continues, pointing to the steam shovel. "Wouldn't you think he was alive? Always seems to me like one of those old-time monsters or dragons we

read about in children's books. I like to sit and watch it."

Monster! Indeed it is a true monster, both in shape and attitude. Its body is represented in the car; its thick neck has all the stockiness of invincibility; and its great square head, with the three steel teeth protruding like the fangs of an undershot bulldog, give it quite the air of a great animal, even in repose. But it is when it is in action that the personality of the thing becomes apparent. The beams of the derrick slide against one another like the sinewy tendons in the neck of a mastodon, the great head lowers itself for the charge, and the teeth fairly glisten as they attack the hillside. Then when some hidden obstacle is encountered and the way becomes temporarily blocked, the pent-up steam within it breaks forth as from its nostrils, and the great thing trembles all over and shrieks out its rage, the shrill tones only dying down to a satisfied grunt when the obstruction has been conquered. It weighs 200,000 pounds, and is the biggest steam shovel in the world. Once it encountered a rock which was too big even for it, and the way it throbbed, screamed, hissed, whistled, and shook when the object of its wrath refused to budge was a moving spectacle indeed.

The man who operates this great piece of mechanism bears the limited distinction of being one of the best steam-shovel workers in the world. He is certainly a perfect master of the machine. The shovel is used, in places, to clean off a ledge preparatory to blasting. Edison, with his sensitive needle, or "magnetic eye," as he calls it, went over the ground above the ledge before it was uncovered, and was able to determine its exact shape. Above the edge of the rock, stakes were driven, and the shovel operator was told to clean it off. So accurate was his work that the channel cut by the great machine did not at any point vary twelve inches from the wall of rock bordering the ore.



END VIEW OF THE GIANT ROLLS.

After passing through the big rolls, an end view of which is here shown, the pieces of rock drop through to the smaller rolls beside which the workman is standing. Five and six ton rocks go through in about three seconds. A constant stream of rock is kept falling into the pit from the floor above, and the crushed rock can be seen rising upward in the elevator on the right, to be dumped into other and smaller sets of rolls, which soon reduce it to dust.

From the steam shovel the rocks, weighing five and six tons, are conveyed to the crushing-plant. The crushing-plant is a large eccentric building, from the open sides of which extends massive iron framework upon which electric cranes are operated. To the casual observer the building seems to be little more than a large platform, the under part of which is closed in, and the upper part of which seems to contain nothing more than an expectant group of men whose business it is to anxiously watch big boulders as they are swung inward by the cranes and dropped into a large square hole in the floor. As each rock disappears, the strained facial expression of each man is enveloped in a cloud of white dust, and a dull boom! boom! announces that some convincing change has taken place in the material. As a matter of fact, the giant, or largest, rolls of the crushing-plant are made to revolve in the first story of the building, and the rock is dumped into the pit which leads down to them from the second story.

END VIEW OF SEPARATING-MAGNETS.

After having been reduced to dust the ore-bearing material is elevated to the cupola of the magnet house. It is dumped into a chute, and allowed to work its way down past the magnet faces, of which there are 480. The sand, being unattracted, passes straight on, and is conveyed by an elevator out of the building and dumped on the sand pile. The ore, attracted by the magnets, is deflected into a chute of its own, and conveyed away to the mixing-house.

This remarkable crushing-apparatus consists primarily of two immense rollers over six feet in diameter and five in width.

The rounded surfaces are studded with great teeth, and the great rolls themselves run within eighteen inches of each other. Looked at from above, these monster crushers, revolving with a surface speed of a mile a minute, and weighing 237,000 pounds, form probably the most awe-compelling abyss in the world. The relentless fangs, constantly traveling inward and downward, impress the mind more strongly than could any bottomless pit, and the feeling becomes all the more intense when one learns that beneath them is another set of rollers somewhat nearer together, with a serrated surface, more wicked if anything in its action than the teeth above. These giant rolls will receive and grind up five and six ton rocks as fast as they can be unloaded from the skips. A skip-load of rock every forty-five seconds was the rate at which the plant was operated for the purpose of testing the capacity of the rolls, but an average of 300 tons an hour is considered a fair running capacity.

It may surprise the superficial observer to learn that the great Corliss engine which operates the rolls takes no part whatever in the crushing process. There is something of a trick in it, but it is an effective answer to the engineers who declared that no machine could be made strong enough to stand the strain of crushing these great boulders. It is the momentum of the seventy tons of metal contained in the moving parts of the rolls which does the crushing. The engine supplies just power enough to run the rolls at a very high speed. If anything—a rock, for instance—drops in between the rolls so as to in any way impede their progress, a clutch by which the rolls are connected to the engine allows the latter to let go its hold. After that the momentum of the rolls does the work of crushing, the engine, of course, immediately catching hold again the moment the impeding rock has been crushed and passed through to the next set of rollers. One might think for the moment

that these rolls would be suddenly stopped by the obstructing rock the moment the power of the engine was withdrawn. But it is only necessary to imagine how that same rock would suffer if allowed to bear the brunt of a head-on collision of two express trains. Only the fastest train travels with the velocity attained by these rolls; and, besides, it is seventy tons of iron and steel against five or six tons of ore-bearing rock. Again, the rock is dropped over ten feet into the pit before it strikes the rolls, and the impact on the rapidly moving roll is often great enough to break the boulder in two. In short, it is the kinetic energy of the rolls that does the real work of crushing. To illustrate the process, it is, according to Mr. Edison, the application of the principle of the pile-driver.

THE ORE ON ITS WAY TO THE MIXING-HOUSE.

A leather belt carries the finely divided ore to a blower-room, where the small percentage of remaining foreign substances is removed from it. Another belt-conveyer then carries it to the mixing-house, where it is dropped into great cylinders and by means of iron paddles is mixed with an adhesive substance.

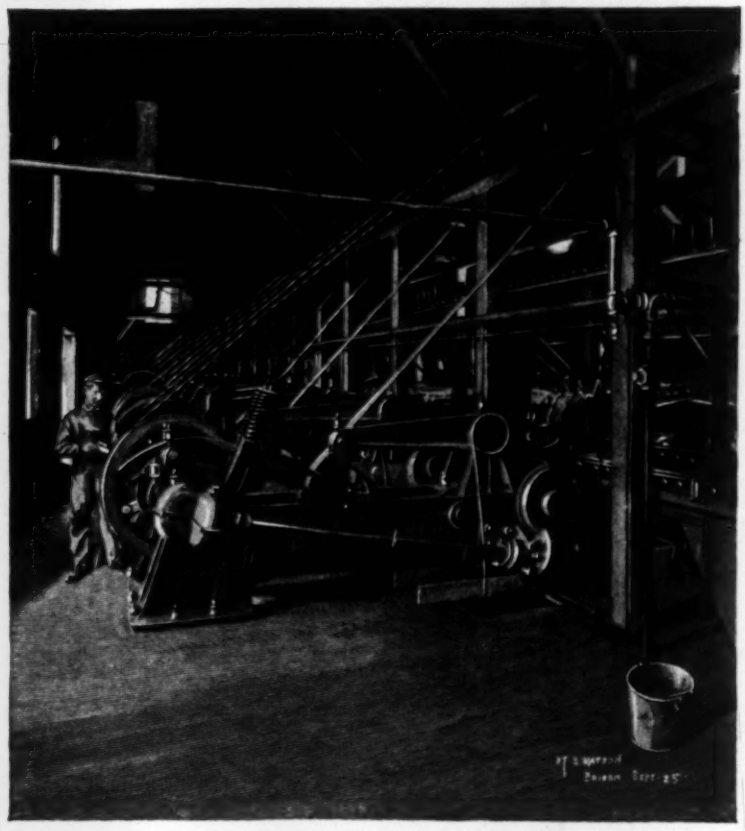
Far down beneath the two sets of rolls described above, a conveyer, or endless chain of iron baskets, catches the crushed rock and carries it up into another part of the building. The rock has now been reduced to pieces the size of a man's head. The conveyer carries these pieces up above three more sets of rolls, and dumps them with a rattle and a bang in between the topmost set of rollers. The rock at this point is reduced more than half, or, let us say, to pieces the size of the fist; and as it falls through in a steady stream it encounters the still more relentless teeth of the next set of rolls, directly underneath. Having passed through these, it has almost reached the fineness of granulated sugar; but when it drops through into the next set, its final pulverization is accomplished, for the slightly serrated surfaces of these rolls fit into each other like two cogwheels, and ore which is not reduced to dust cannot accomplish the passage between them. Here, as before, an elevator catches the crushed product, and carries it to the top of an immense dryer (for the work goes on in wet as well as dry weather), and thence to the roof of a mammoth stock-house, capable of holding 16,000 tons, and dumps it therein for future use.

From this point the ore and sand go on a wild career which never stops till one has reached the cars and the other has reached the sand pile. In the cellar of the stock-house is a deep, long trench. The sloping sides of the house lead to this trench, so that the tendency of the crude ore contained therein is to slide into it. Working in the trench is a conveyer which carries the crude material across the road and up a covered way to the big barn-like structure known locally as the refining mill. The building is most interesting because it is herein that the ore is separated from the sand. It is, on the other hand, uninteresting from the view point of the spectator, because most of the interior mechanism is encased. Nevertheless there are wonderful processes constantly in operation within. It is the perfection of automatic action. No automaton of old ever worked out a more intricate movement than do the sand and ore within this building. Better still, no *ensemble* of springs or other paraphernalia is required

for the work. The building is over six stories high, and the conveyer which brings the crude ore from the cellar of the stock-house elevates it to the very cupola, dumps it into space, and allows it to work out its own salvation on its way to the basement. Incidentally it performs several feats on its way downward. It screens itself several times, separates from the sand, divides its coarse grains from the fine, and finally wends its way out of the building to do great things later on. But all of this is done with hardly any other aid than that of gravity.

The ore passes altogether 480 magnets. The first set of magnets has the least pulling or deflecting power, to use a popular term. The third set has the greatest pulling power, and the second set is intermediate in strength. On its way down, the crushed rock falls past the lines of magnets in the form of a fine curtain. The sand passes straight on downward, and is carried away, through chutes, out of the building. The ore, on the other hand, is deflected from the course taken by the sand, and drops into a chute of its own. It falls on a conveyer which carries it out of the building to another stock-house. On the way out of the building the ore passes through a blowing-room in which such dust as may have passed through the screens with it is blown from it. None of the iron ore is lost, and even the dust is sold—to be used in paint and other substances. The ore is finally conveyed to another stock-house, which contains nothing but pure, powdered iron.

Five thousand tons of iron, fine enough almost to go through a flour sieve! It looks like a great pile of black sand, and one cannot help but marvel at it when the thought of what the fire will change it into forces itself upon one's mind; for while as it lies it is probably the heaviest mass of powder in the world, in the hands of the smelter it will be changed, twisted, reshaped, and reformed into objects which ultimately become associated with our daily lives.



THE BRIQUETTING MACHINES.

By means of conveyers the now sticky mass of ore is brought to the briquetting machines to be made into bricks, or briquettes. There are thirty briquetting machines, and a constant stream of ore pours into the ends of the machines. The proper amount of ore falls into an orifice about three inches wide and one inch deep, and a plunger then comes forward and exerts thousands of pounds pressure on the ore. As the plunger recedes, the cylinder holding the briquette turns downward, and the newly-made briquette drops out into another conveyer, to be carried into baking ovens.

But this ore, however pure, however well calculated to take its place in the business of life, cannot be smelted in its present form. If thrown into the furnace in the form of dust, a large part would be blown out by the powerful blast. It must be made up into lumps or cakes, so that when placed in the furnace the gases can circulate freely through and around it. For this purpose it is conveyed to the briquetting mill by means of another of those conveyers which seem to reach out of the ground in all directions. In fact, you might start in any building in Edison.

and, by going into the cellar, walk through the conveyer way up to the top story of the next building, descend to the cellar as before, and so on until you had completed the circuit of every house in the place.

The ore is mixed with an adhesive material which binds every particle to its neighbors. The mixing-machines are long iron cylinders in which a succession of curved iron paddles, or dashers, sitting on springs, are constantly revolving. The ore is supplied from an endless rope conveyer to the mixers, while the binding material is conveyed in pipes, both passing into the cylinders. The ore passes into one end of the cylinder, and is thoroughly mixed before it passes out of the other end. Again is the now sticky mass of ore dropped into a conveyer, and carried into another building. In this last structure are the briquetting machines. They are devised by Edison, and consist primarily of a plunger which forces the sticky ore into a small round orifice, subjecting it in the meantime to thousands of pounds pressure. The nicely rounded briquettes, ranging from two and one-half to three and one-half inches in diameter, drop into another conveyer, and are carried into ovens in which they are baked, the conveyer itself traveling five times up and down the interior of the ovens before they reappear. There are thirty briquette-making machines and fifteen ovens, built side by side. The baking is necessary in order to make the briquettes sufficiently hard when cold to stand shipment. The baking also prevents them from disintegrating under the action of heat in the blast-furnaces, and leaves them so that, although very porous, they will not absorb water. Having left the ovens, the briquettes are transported by iron-rope conveyers to the railway and loaded on to cars.

Six thousand tons of crude ore are changed into 1,500 tons of briquettes in each day's run of twenty hours. Twenty-eight hundred briquettes are contained in one ton, and an average freight car will hold twenty tons. This means that seventy-five carloads of pure iron ore are wrested daily from heretofore worthless rock and sent furnaceward to be made into objects which will be useful to all the world.

This is all there is in the process. But how much that is! A small conception of the labor involved may be had from an inkling obtained from Mr. W. S. Mallory, Mr. Edison's second in command. "When

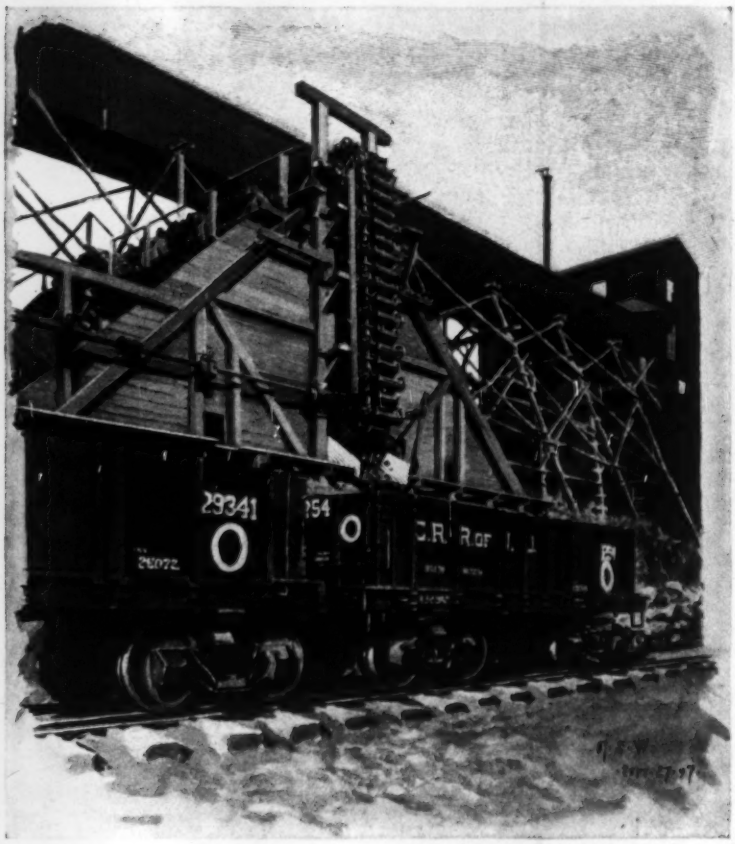
THE GREAT OVENS IN THE BRIQUETTING PLANT.

A conveyer carries the briquettes of pure iron ore into the ovens, where they are baked to prevent them from disintegrating when exposed to the atmosphere during transportation. The conveyer travels five times around the ovens, and the briquettes are exposed to a very high temperature before they reappear to be loaded on the cars.

it was found necessary," says Mr. Mallory, "to make the concentrates (iron ore) into briquettes, there were five things to be accomplished: First, the binding material must be very cheap. Second, it must be of such a nature that very little of it would be required per ton of concentrates. Third, the briquettes must be very porous, to permit the gases of the furnace to enter; and yet must not absorb water, else they could not be shipped in open cars. Fourth, it must make the briquettes hard enough when cold to stand transportation. Fifth, it must make the briquettes such that they would not disintegrate by action of the heat in the blast-furnace. To get the above five conditions, Mr. Edison was compelled to try several thousand experiments. At the time of the discovery of X-rays, Mr. Edison made 1,800 experiments before he hit upon tungstate of calcium for the fluoroscope, and the newspapers said that a man who would try that many experiments ought to succeed. But here the labor and patience involved was many times greater, and this, please understand, represents but one feature of the plant."

One intricate piece of mechanism used in the crushing-plant illustrates the genius of Edison in making a benefit of what otherwise would prove a detriment. The process of crushing is very dusty, and at first the dust got into the bearings of the elevators and cut everything badly, and the same trouble was experienced throughout the mill, notwithstanding every precaution. Mr. Edison immediately devised a system of oiling all bearings (of which there are 4,200) which depends upon, and will not work without, grit and dust. This is only an item, but the plant is full of these items.

Again, the three high rolls in the magnet-house are wonderful examples of how friction may be rendered almost nothing. The friction of ordinary crushing-rolls at the high efficiency and pressure necessary for this work amounts under ordinary conditions to about eighty per cent. of the horse-power applied, leaving only twenty per cent. to do the actual work on the rock. On the three high rolls invented by Mr. Edison, the friction is only sixteen per cent., leaving eighty-four per cent. of the horse-power applied available for the work of crushing. The principle involved is too intricate to explain, but it means the beginning of a new era in crushing-machinery. This principle can be applied in every industry where crushing is a feature, from gold extracting to sugar manufacturing. The reduction of friction in the mechanism simply means that machinery of small power can be used in work which heretofore has required machinery of very great power.



LOADING FREIGHT CARS WITH BRIQUETTES.

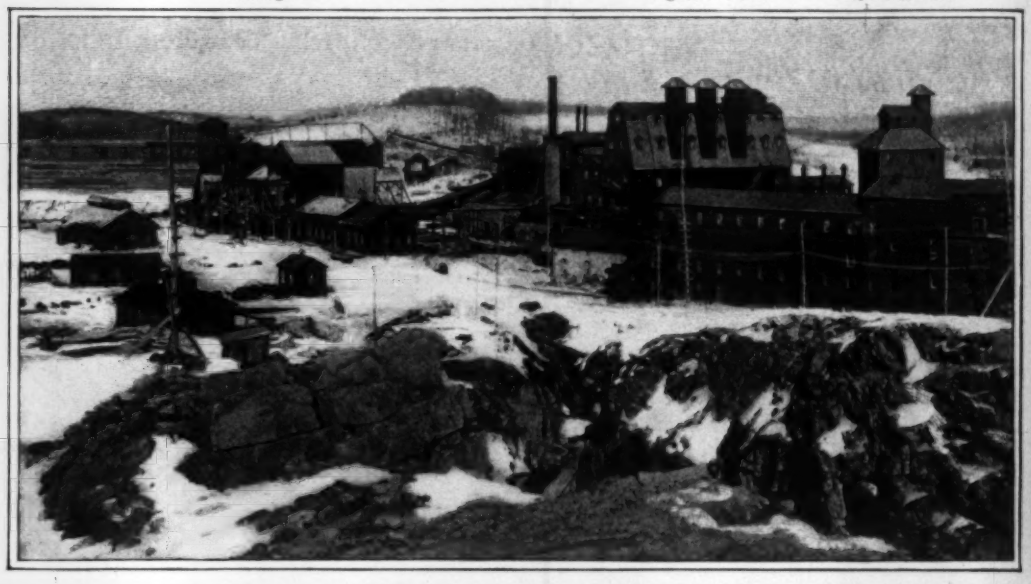
From the ovens the briquettes are conveyed to the railroad and dumped into cars. Twenty-eight hundred briquettes are contained in one ton. Each car holds twenty tons, and an average of seventy-five car loads of pure iron ore are produced daily.

THE SAND TOWER.

When the sand has been separated from the ore a conveyer carries it out of the building and up an immense craneway, from which it is dumped on a pile. The large arm from which the sand is dropped is movable. One pile is made, then another. Cars carry the first one away, then the arm is swung back and the gap is filled up. The sand is valuable for building purposes, and long train-loads of it are carried away from the village of Edison every day.

Over on one side of the works a very beautiful sight may be viewed. It is a cataract of sand, fine, even, and pure, and different from any other sand in the world. From the magnet-house extends a derrick-like structure holding a conveyer. Projecting far out into the air from the end of this structure is a giant arm. The arm, like its support, holds a conveyer. This contrivance spouts sand. A stream of it, shimmering and shining in the sunlight, descends and mixes with the great cone already piled up beneath. Nothing could be more beautiful than this gorgeous cataract of powdered rock falling like a veil, and noiselessly adding to the great mass below. Nor is it a useless accumulation. It is sold for various purposes to builders and manufacturers, who seek it more eagerly than they do the sand of the seashore or

Crushing Plant. Magnet-House. Briquetting Plant.



GENERAL VIEW OF EDISON IN WINTER.

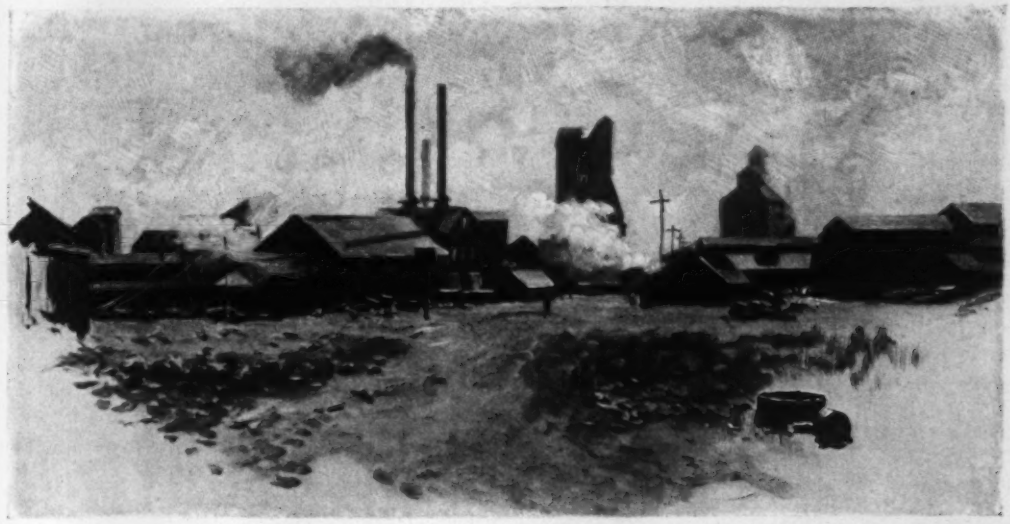
Taken from Summerville, the village where the miners live.

of the bank. Seashore or bank sand has, in the course of centuries, lost its edges, because the particles have constantly rubbed against one another. Broken rock sand, however, is very sharp, and for cement and lime-work is very desirable. And in many other directions it is also valuable, and the demand promises an aid in cheapening the production of the ore.

"I want to say," says Mr. Mallory, "and I know whereof I speak, for I have been with him night and day for several years, that ninety-nine per cent. of the credit of all the invention and new work of this establishment is due personally to Mr. Edison. I have heard it stated that Mr. Edison is an organizer who uses the brains of other men. Nothing could be further from the truth than this. If this place was preserved as a monument for him, his memory would be placed upon no false pedestal. I have seen him by night and by day, in all weathers, and under all conditions, and I have found him always the same, the personification of concentration of purpose, and with a long-distance judgment at his beck and call which, however strained it may seem at the time, we have all learned to respect as being sure to prove right in the end. And what has been said of his personal magnetism has not been overstated. I doubt if there is another man living for whom his men would do as much. I suppose it is the power of example. We have here many men who have left well-kept homes to come up into the backwoods and toil day and night mainly out of loyalty to Mr. Edison. The fact that the 'old man' does it seems to be sufficient reason for them to do it; for what is good enough for the 'old man' is good enough for them. This, at least, is the spirit that prevails."

That this is the spirit which pervades the community can be easily seen by anyone who visits the place. Up on the hilltop, in the shanties of Summerville, dwell laborers of the poorer class. Far over on the other side of the mine stands the "White House." It is a little dwelling in which Edison lives with his chief men. At intermediate spots stand the shanties in which live the workmen of intermediate class. But from all of these dwellings comes a reverence for the master which is quite as strong and healthy in one place as in the other. As he moves among them all, none of them can have a true conception of the great things he is constantly planning, but they all know it is for their good and for the good of the world at large. No man has done more than Edison to benefit his generation. He essentially is the man of his time. Other men may do great things in the time to come, but whatever these things may be, they can never create more radical changes in the conduct of human life than have Edison's inventions. His old duster and his older straw hat can be seen flitting hither and thither about the

works, their owner apparently intent upon nothing out of the ordinary; but the constant suggestions which he makes to the heads of the various departments show that the wonderful brain is never inactive. The present enterprise was planned years ago, and now that it is finally completed, Mr. Edison's mind will revert to even greater schemes of conquest; and at this moment it is safe to say that he is planning out some great achievement which will take the world more by storm than have the great things he has already accomplished.



HALCYON DAYS.

By Walt Whitman.

Not from successful love alone,
Nor wealth, nor honor'd middle age, nor victories of politics or war;
But as life wanes, and all the turbulent passions calm,
As gorgeous, vapory, silent hues cover the evening sky,
As softness, fulness, rest, suffuse the frame, like freshier, balmier air,
As the days take on a mellower light, and the apple at last hangs really finish'd
and indolent-ripe on the tree,
Then for the teeming, quietest, happiest days of all!
The brooding and blissful halcyon days!

From "November Boughs," by Walt Whitman.
Small, Maynard & Co., Publishers, Boston.
By special permission.

PRIZE DRAWINGS.

A TYPE OF AMERICAN HEAD. PAINTED BY MISS LILLIE O'RYAN.

The above drawing received the first prize, and the drawing reproduced on the opposite page received the second prize, offered by McCLURE'S MAGAZINE, at the suggestion of Dr. Wallace Wood, of the University of New York, in a competition for drawings of ideal and typical American heads. Though this competition was announced entirely through circulars sent to art teachers and students and a single notice in "The Art Student," and the time given was quite short,

PRIZE DRAWINGS.

A TYPE OF AMERICAN HEAD. DRAWN BY J. HARRISON MILLS.

about ninety drawings and paintings in all mediums were submitted. All were exhibited in Dr. Wood's lecture room in the University Building, New York. The prizes were awarded by a committee composed of Dr. Wallace Wood, Mr. Ernest Knaupft, editor of "The Art Student," and a representative of McCLURE'S MAGAZINE. Honorable mention was also made of the contributions of W. D. Parrish, Vincent Aderente, Katherine S. Valas, and William Forsyth.

SAY NOT THE STRUGGLE NOUGHT AVAILETH.

By Arthur Hugh Clough.

Say not, the struggle nought availeth,
The labor and the wounds are vain,
The enemy faints not, nor faileth,
And as things have been they remain.

If hopes were dupes, fears may be liars;
It may be, in yon smoke concealed,
Your comrades chase e'en now the fliers,
And, but for you, possess the field.

For while the tired waves, vainly breaking,
Seem here no painful inch to gain,
Far back, through creeks and inlets making,
Comes silent, flooding in, the main.

And not by eastern windows only,
When daylight comes, comes in the light;
In front, the sun climbs slow, how slowly,
But westward, look, the land is bright.

TO R. T. H. B.

By William Ernest Henley.

Out of the night that covers me,
Black as the pit from pole to pole,
I thank whatever gods may be
For my unconquerable soul.

In the fell clutch of circumstance
I have not winced nor cried aloud.
Under the bludgeonings of chance
My head is bloody, but unbowed.

Beyond this place of wrath and tears
Looms but the Horror of the shade.
And yet the menace of the years
Finds and shall find me unafraid.

It matters not how strait the gate,
How charged with punishments the scroll,
I am the master of my fate:
I am the captain of my soul.

LIFE IS STRUGGLE.

By Arthur Hugh Clough.

To wear out heart, and nerves, and brain
And give oneself a world of pain;
Be eager, angry, fierce, and hot,
Imperious, supple—God knows what,
For what's all one to have or not;
O false, unwise, absurd, and vain!
For 'tis not joy, it is not gain,
It is not in itself a bliss,
Only it is precisely this
That keeps us all alive.

To say we truly feel the pain,
And quite are sinking with the strain;—
Entirely, simply, undeceived,
Believe, and say we ne'er believed
The object, e'en were it achieved,
A thing we e'er had cared to keep;
With heart and soul to hold it cheap,
And then to go and try it again;
O false, unwise, absurd, and vain!
O, 'tis not joy, and 'tis not bliss,
Only it is precisely this
That keeps us still alive.

From "Poems," by Arthur Hugh Clough (Macmillan & Co., Publishers, New York,); and "A Book of Verses," by William Ernest Henley (Charles Scribner's Sons, Publishers, New York).